



Carleton College

SEVENTH ANNUAL CALENDAR

DAY AND EVENING DIVISIONS

1948 - 49

As this Calendar is published several weeks before the opening of the session, the College reserves the right to make whatever changes circumstances may require, including cancellation of particular courses.

Carleton College

SEVENTH ANNUAL CALENDAR

DAY AND EVENING DIVISIONS

for the academic year

1948 - 49

FIRST AVENUE AT LYON
OTTAWA, ONTARIO
CANADA

Telephone: 5-5161

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The Academic Year

1948

SUMMER SESSION

- May 22 Last day for applications for summer term.
- May 25-28 Registration for summer term.
- May 31 Summer term classes begin.
- July 1 Dominion Day. No classes.
- July 31 Last day for applications for supplemental examinations.
- Aug. 23 Supplemental examinations begin.
- Aug. 30 Last day of summer term classes.
- Sept. 2 Summer term examinations.

WINTER SESSION

- Sept. 8-15 Registration for classes in the evening division.
- Sept. 16 Classes begin in the evening division.
- Sept. 16-22 Registration for classes in the day division.
- Sept. 20 First year Engineering classes begin.
- Sept. 23 Day classes begin in Arts, Journalism, Commerce and Science.
- Sept. 30 Second year Engineering classes begin.
- Oct. 11 Thanksgiving Day. No classes.
- Dec. 22 Last day of classes before Christmas in day and evening divisions.

1949

- Jan. 3 Classes reopen after Christmas vacation.
- Jan. 10 Mid-year examinations begin in day division.
- Jan. 17 Mid-year examinations begin in evening division.
Second term begins in day division.
- Jan. 24 Second term begins in evening division.
- Apr. 14 Last day of classes in Engineering.
- Apr. 15-17 Easter week-end. No classes.
- Apr. 23 Last day of classes in the day division.
- Apr. 30 Last day of examinations in Engineering.
- May 7 Last day of examinations in day division.
- May 20 Last day of classes in evening division.
- May 31 Last day of examinations in evening division.

Historical Statement

During the autumn and winter of 1938-39, a committee of the Ottawa Y.M.C.A., with Dr. H. L. Keenleyside as Chairman, held periodic meetings to discuss the matter of facilities for higher education in the City. While the Roman Catholic Church was served by its own institutions, the somewhat larger non-Roman Catholic population had no institution conducting college work, and it appeared that in no other Canadian city was there a group of equal size not served by at least a junior college. Several possibilities for improving the situation were considered and some were tentatively explored.

With the outbreak of war in 1939 the committee discontinued its meetings, but by 1941 it had become apparent that circumstances brought about by the war had increased the need of facilities for higher education in the Capital. The problem was consequently taken up again by a group, mainly the same as the earlier committee in personnel, under the chairmanship of the late Dr. Henry Marshall Tory.

The situation was discussed with the heads of universities in other cities attended in numbers by Ottawa students and with many prominent citizens of Ottawa. Teaching resources for evening classes, good at any time in the Capital, had been greatly increased by the presence of many university teachers in temporary wartime positions. Enquiry revealed a sufficient number of teachers willing and anxious to co-operate. The idea of establishing an autonomous association based on general community support for the purpose of conducting a college, and promoting higher educational work generally, met with cordial acceptance and a group of citizens guaranteed sufficient funds to make an experimental period possible. Plans were accordingly made to establish "The Ottawa Association for the Advancement of Learning," the immediate objects of which would be to offer evening instruction in the first two years of university work under the name of Carleton College, and later to establish an Institute of Public Administration.

The Ottawa Association for the Advancement of Learning was organized on June 18, 1942, and incorporated under the laws of the Province of Ontario on June 19, 1943. Carleton College, the Association's first operating unit, was established in the summer of 1942 and opened its first (evening) classes on September 21st in that year. Admission to its credit courses in the first year of Arts, Commerce and Science, was by Junior Matriculation.

All classes, in the beginning and until 1945, were held in the High School of Commerce and in Glebe Collegiate Institute.

The response to the educational offerings of the new college was immediate and impressive. All expectations of the organizers of the College were far exceeded when 550 students registered for the first academic year, 1942-43.

The Institute of Public Administration was established in the summer of 1943 and opened its first (evening) classes on October 4, 1943. The total number of students registered in the College and in the Institute for the academic year 1943-44 was 885. This figure was increased to 938 for the session 1944-45.

In the early months of 1945 it became obvious that special arrangements must be made to receive the great number of young war veterans who were beginning to return from overseas. On March 19, 1945, the College opened the first of a series of nine intensive courses, each of from four to six months' duration. These special courses in Matriculation subjects were given in day classes, the first day-time classes in the history of the College. It was for these veterans' courses, also, that Carleton College employed its first full-time instructors. By the end of August, 1946, when the special courses were discontinued, more than 1,200 ex-servicemen and women had availed themselves of the facilities of this young war-born college in making their first approach to their educational rehabilitation.

Through these turbulent months, the needs of the civilian students were not neglected. Although they could not be accommodated in the day classes, evening class opportunities were being constantly expanded. New subjects of instruction were offered. More teachers were engaged. The civilian student registration in September, 1945, was above 1,000. Thus, operating in rented and widely-scattered quarters, and depending with a very few exceptions upon the efforts of part-time teachers, the College within four years reached a period (March, 1945, to September, 1946) in which it had more than 2,200 students under instruction, four times the total of its initial registration of 550 in September, 1942.

In September, 1946, Carleton College for the first time came into possession of a building of its own, a four-storey structure situated at the south-west corner of First Avenue and Lyon Street, on a property running west from Lyon between First and Second Avenues. Originally the property of the Ottawa Ladies' College, the building and grounds had been bought early in the war by the Department of National Defence (Army) and put into use as a barracks of the Canadian Women's Army Corps. Carleton College opened full-scale day and evening classes in this building on September 16, 1946.

The heavy inflow of veterans had by this time subsided to the point where it was found possible to accommodate veteran and civilian students

in the same classes, and to revert in all classes to the regular academic year, September through May. The total registration in September, 1946, was 1,550.

Two major advances in the teaching curriculum were made at the beginning of the academic year 1945-46. In response to many requests, specifically from discharged service personnel, instruction was offered in a new Department of Journalism. This began as a two-year course with two years in Arts as the entrance requirement. Requests from other ex-servicemen resulted similarly in a decision to offer instruction in the subjects of Engineering.

During 1945-46, because of the growth of the work of the College and in the Institute of Public Administration, and because of the intimate relation of their respective courses of study, it was decided to consolidate the courses in Arts, Pure Science, Journalism, and Engineering in a Faculty of Arts and Science, and to reorganize the Institute of Public Administration as a Faculty of Public Administration under the College and equal in rank to the Faculty of Arts and Science.

Accordingly, when the College opened for its fifth year of operation in September, 1946, the following courses were offered:

In the Faculty of Arts and Science.

With Junior Matriculation as the admission requirement, day or evening instruction in the first and second years of the four-year course leading to the Bachelor of Arts, Bachelor of Commerce and Bachelor of Science degrees, and all four years of a course leading to the degree of Bachelor of Journalism. With Senior Matriculation as the admission requirement, daytime instruction in the first year of Engineering. In the Department of General Education, courses of cultural and practical value open without specific admission requirement to the Ottawa public.

In the Faculty of Public Administration.

With Junior Matriculation as the admission requirement, a four-year course leading to the degree of Bachelor of Public Administration. Subjects in the first and second years were to be taken in day or evening classes. Subjects in the third and fourth years were offered in evening classes only.

The first degrees, three Bachelor of Journalism, and three Bachelor of Public Administration, were conferred at a Convocation held on October 23, 1946.

On February 6, 1947, the College sustained a severe blow in the loss by death of Henry Marshall Tory, D.Sc., LL.D., D.C.L., F.R.S.C.,

F.R.Hist.S., first Chairman of the Board of Governors, first President of the College, and the leader more than any other responsible for the success attained by Carleton College in the first five years of its existence.

Dr. Tory's place as Chairman of the Board of Governors was taken by H. S. Southam, Esquire, C.M.G. On February 18, 1947, Murdoch Maxwell MacOdrum, M.A., Ph.D., formerly Vice-President of the College, was appointed by the Board of Governors to succeed Dr. Tory as President.

Determined to continue the work so well begun by Dr. Tory, the Board of Governors decided to proceed without delay to the execution of plans made in the autumn of 1946 for the raising by public subscription of a million dollar fund for Carleton College. The campaign was planned in two stages: the first with an objective of \$500,000 to pay off the debt on the recently acquired building, to enlarge it and to provide necessary equipment; the second with an objective of a further \$500,000 to endow the College. The first stage was launched in mid-February, 1947, and subscriptions sought for the period 1947-49. By June 1, 1948, a total of \$420,000 had been pledged by more than 1,500 subscribers.

In preparation for the academic year 1947-48 complete four-year Pass Courses and five-year Honour Courses were organized, leading to the Bachelor of Arts, Bachelor of Science and Bachelor of Commerce degrees. The third year in all these courses was made available to students of the College in September, 1947. The fourth year will be available in September, 1948, and the fifth year of the Honour Courses in September, 1949. Carleton College can therefore look forward to the conferring of its first Bachelor of Arts, Bachelor of Science and Bachelor of Commerce degrees in the Spring of 1949, and its first five-year Honour degrees in the Spring of 1950.

For the year 1947-48, enrolment in the College included 535 day students, 733 evening students in degree courses and an additional 364 in extension courses, making a total, excluding duplicates, of 1,611 students.

Primarily as a service to students studying for degrees in the evening division of the College, summer evening courses are offered for the first time in the Summer of 1948. Also in the Summer of 1948, a three-storey brick house at 275 First Avenue was acquired to accommodate the rapidly expanding programme of student extra-curricular activities.

The Board of Governors

- PHILIP DANSKEN ROSS, B.A.Sc., LL.D., *Honorary Chairman of the Board*,
President, Journal Publishing Co. of Ottawa, Ltd.
- HARRY STEVENSON SOUTHAM, C.M.G., *Chairman of the Board*¹,
Vice-President and Publisher, Citizen Publishing Co.
- CLARENCE CECIL GIBSON, K.C., *Secretary of the Board*³
Honeywell, Baker, Gibson and Wotherspoon, Barristers.
- WILLIAM DUBARRY MCKEWEN, Esq., *Treasurer of the Board*²,
Assistant General Manager, Metropolitan Life Insurance Co.
- MURDOCH MAXWELL MACODRUM, M.A., Ph.D.,
President, Carleton College, *Member Ex-Officio*
- FREDERIC E. BRONSON, Chairman, Federal District Commission²
- W. M. CONNOR, President, Northern Tool and Gauge Ltd.²
- CHARLES G. COWAN, President, British-American Bank Note Co. Ltd.³
- ARTHUR A. CRAWLEY, President, Arthur A. Crawley & Co.³
- MCGREGOR EASSON, B.A., D.Paed.,
Chief Inspector, Ottawa Public School Board³
- COL. C. M. EDWARDS, D.S.O., President, W. C. Edwards & Co. Ltd.³
- C. FRASER ELLIOTT, Canadian Ambassador to Chile¹
- KENNETH A. GREENE, Canadian High Commissioner to Australia²
- EDWARD J. JENKINS, General Secretary, Ottawa Y.M.C.A.²
- F. C. JENNINGS, Librarian, Ottawa Public Library³
- HUGH L. KEENLEYSIDE, M.A., Ph.D., F.R.Hist.S.,
Deputy Minister, Department of Mines and Resources¹
- W. S. KIDD, Vice-President and General Manager,
The E. B. Eddy Co. Ltd.³
- W. C. MACARTNEY, D.D.S., Dentist¹
- A. E. MACRAE, Consulting Engineer and Patent Attorney²
- T. R. MONTGOMERY, Assistant Chief of English Journals, H. of C.¹
- THE HONORABLE NORMAN M. PATERSON, Senator²
- FRANK G. PATTEN, Sec.-Treas., Ottawa Collegiate Institute Board¹
- THE HON. MR. JUSTICE I. C. RAND, Supreme Court of Canada¹
- JOHN E. ROBBINS, M.A., Ph.D., Chief, Education Branch,
Dominion Bureau of Statistics²
- F. W. WHITE, President, Ontario Hughes-Owens Co. Ltd.³
- NORMAN F. WILSON, Director, W. C. Edwards & Co. Ltd.¹

¹Retires in 1948. ²Retires in 1949. ³Retires in 1950.

Officers of Administration

President

MURDOCH MAXWELL MACODRUM,
B.A. (Dal.), M.A. (McGill), Ph.D. (Glasgow)

Registrar and Director of Student Personnel Services

EDWARD FLETCHER SHEFFIELD, M.A. (McGill)

Assistant Registrar

ELIZABETH M. BUCKLEY, B.A. (Queen's)

Personnel Assistant

GRACE E. MAYNARD

Director of Athletics

WILBUR T. NIXON

Medical Adviser

ERIC L. DAVEY, M.D., D.P.H. (Tor.)

Bursar

FREDERICK JAMES TURNER, B.Com., M.A. (Tor.)

Accountant

ELIZABETH M. MEIKLE

Librarian

HILDA G. GIFFORD, B.A., B.L.S. (McGill)

Officers of Instruction

SUMMER 1948

- A. Munro Beattie, B.A. (Tor.),
Lecturer in English
Charlotte Brown, B.A. (Tor.),
Assistant in English
Dorothy Chamberlin, M.A. (McGill),
Assistant in English
John Garner, B.A. (Tor.),
Lecturer in Political Science
Adélard Gascon, M.A., Ph.D. (Ottawa), B.Paed. (Montréal),
Sessional Lecturer in French
David Ivor, M.A. (Western), Ph.D. (London),
Sessional Lecturer in Economics
Carson E. Johnson, M.A. (Western),
Sessional Lecturer in Psychology
John W. Mayne, B.Sc., M.A. (Acadia), M.Sc. (Brown),
Lecturer in Mathematics
Charles E. McGaughey, M.A. (Queen's),
Sessional Lecturer in Political Science
Violet M. Nelson, B.A. (Queen's),
Sessional Lecturer in History
Samuel Trachtenberg, B.A. (Man.), M.A. (Tor.),
Sessional Lecturer in Economics
J. M. Wyatt, M.A. (Tor.),
Sessional Lecturer in Philosophy

WINTER 1948-49.

Full-time Instructors

- Peter V. Alexander, B.A. (Queen's),
Sessional Lecturer in English
A. Munro Beattie, B.A. (Tor.),
Assistant Professor of English
Charlotte Brown, B.A. (Tor.),
Assistant in English
Dorothy Chamberlin, M.A. (McGill),
Assistant in English
T. James S. Cole, B.Sc. (London),
Demonstrator in Physics
Gordon S. Couse, B.A. (McMaster),
Lecturer in History

- H. Jack Duffus, B.A.Sc. (U.B.C.),
Lecturer in Physics
- Wilfrid Eggleston, M.B.E., B.A. (Queen's),
Professor of Journalism and Director of the Department
- Willard H. Ellis, B.A. (Queen's),
Sessional Demonstrator in Chemistry
- David M. L. Farr, B.A. (U.B.C.), M.A. (Tor.),
Lecturer in History
- Agnes Y. Fleming, B.Com., B.Ed. (Alta.),
Lecturer in Commerce
- Paul W. Fox, M.A. (Tor.),
Lecturer in Political Science
- M. Mercedes French, B.A. (Tor.),
Lecturer in Spanish
- R. Bruce Gamble, B.Sc. (McGill),
Sessional Lecturer in Mathematics
- James A. Gibson, B.A. (U.B.C.), B.A., B.Litt., D.Phil. (Oxon.),
Associate Professor of History
- H. Scott Gordon, B.A. (Dal.), M.A. (Columbia),
Assistant Professor of Economics
- James M. Holmes, B.Sc. (U.N.B.), M.A. (Western), Ph.D. (McGill),
Lecturer in Chemistry
- Doris I. Inch, M.A. (Tor.),
Lecturer in Spanish
- G. Ross Love, M.A. (Western), Ph.D. (Tor.),
Assistant Professor of Physics
- Frank MacKinnon, B.A. (McGill), M.A. (Tor.),
Assistant Professor of Political Science
- M. M. MacOdrum, B.A. (Dal.), M.A. (McGill), Ph.D. (Glasgow),
Lecturer in English
- M. S. Macphail, B.A. (Queen's), M.A. (McGill), Ph.D. (Oxon.),
Associate Professor of Mathematics
- John W. Mayne, B.Sc., M.A. (Acadia), M.Sc. (Brown),
Lecturer in Mathematics
(On leave of absence for graduate study, session 1948-49)
- C. G. Stewart McKeown, M.A. (Tor. and Princeton),
Lecturer in Philosophy
- Henry Montgomery, B.A. (Cantab.),
Lecturer in Chemistry
- T. F. Morris, M.A., Ph.D. (Tor.),
Lecturer in Mathematics

- John M. Morton, M.Sc. (Dal.), Ph.D. (Princeton),
 Assistant Professor of Chemistry
- Allan M. Munn, B.Sc. (Queen's), M.Sc., Ph.D. (McGill),
 Assistant Professor of Physics
- Herbert H. J. Nesbitt, B.A. (Queen's), M.A., Ph.D. (Tor.),
 Assistant Professor of Biology
- Lorne N. Richardson, M.A. (Tor.), M.Sc. (McGill),
 Professor of Mathematics and Director of Science Studies
- Donald M. Shepherd, M.A. (Queen's),
 Lecturer in Classics
- Ernest W. Stedman, C.B., O.B.E., M.I.C.E., M.E.I.C., F.R.Ae.S.,
 F.I.Ae.S., M.I.M., A.R.C.Sc.,
 Assistant Professor of Engineering
- J. S. Tassie, B.A. (McMaster), M.A. (Tor.),
 Lecturer in French
- C. W. Taylor,
 Sessional Instructor in Draughting
- Frederick J. Turner, B.Com., M.A. (Tor.),
 Assistant Professor of Commerce
- William P. Wilgar, B.A. (Queen's), M.A. (Cantab.),
 Assistant Professor of English
- J. Perry Young, B.A. (Queen's), D. ès L. (Bordeaux),
 Lecturer in French

Sessional Lecturers, Part-Time

- Gordon A. Adams, B.A. (Queen's), M.Sc. (Western),
 Ph.D. (Chicago)..... Biochemistry
- F. J. Alcock, B.A. (Tor.), Ph.D. (Yale), F.R.S.C..... Geology
- A. J. Bénéteau, B.A. (Queen's), Ph.D. (Ottawa)..... French
- Charles W. Bishop, B.A. (Tor.), M.A. (Columbia),
 D.D. (Hon. Queen's)..... Religious
 Knowledge
- V. E. Bullock, M.A. (Queen's), A.C.I.C..... Chemistry
- W. L. Cassells, B.Sc. (McGill), M.E.I.C..... Surveying
- H. N. Corbett, B.Com. (Queen's)..... Accounting
- Murray E. Corlett, B.A. (Tor.)..... Commercial
 Law
- H. H. Coulson, M.A. (Cantab.)..... Economics
- Alan Deakin, B.S.A. (McGill),
 M.S., Ph.D. (Wisconsin)..... Biology
- Walter E. Duffett, B.Com. (Tor.),
 M.Sc. (Econ.) (London)..... Economics
- Florence S. Dunlop, B.A. (Queen's),
 M.A., Ph.D. (Columbia)..... Psychology

James M. Harrison, B.Sc. (Man.), Ph.D. (Queen's)	Geology
Gordon F. Henderson, B.A. (Tor.)	Public Law
Richard Hoff, LL.D. (Breslau)	German
C. Y. Hopkins, M.A. (Queen's), Ph.D. (New York)	Chemistry
E. R. Hopkins, B.A. (Tor. and Oxon.), LL.B. (Sask.)	Public Law
James Willis Howard, B.S.A. (Tor.), Ph.D. (Cornell), F.B.Ps. S.	Psychology
R. H. Hubbard, B.A. (McMaster), A.M., Ph.D. (Wisconsin)	Fine Arts
Flora E. Hurst, B.A. (U.B.C.), M.A. (Bryn Mawr)	Social Policy
Claude Isbister, B.A. (Man.), A.M., Ph.D. (Harvard)	Economics
Nathan Keyfitz, B.Sc. (McGill)	Statistics
Danilo I. Lalkow, M.D. (Moscow)	Russian
R. W. Lawson, B.A. (Man.), B.A., M.A. (Oxon.)	Economics
J. Douglas Leechman, B.Sc. (St. Patrick's), M.A., Ph.D. (Ottawa)	Journalism
Harold E. MacLean	Draughting
Robert G. McCorkle, B.Acc. (Sask.), C.A.	Accounting
Robert Alexander MacKay, B.A. (Tor.), Ph.D. (Princeton), F.R.S.C.	Political Science
N. L. McKellar, B.A., B.Com. (U.B.C.)	Social Policy
J. M. McQueen, M.A. (Tor.)	History
Myron MacTavish, Mus.B. (Tor.), L.T.C.M., F.A.G.O., Chm., F.C.C.O.	Music
L. R. Merkley, M.A. (Queen's), B.Paed. (Tor.)	Biology
L. W. Moffit, B.A. (Tor.), Ph.D. (Edin.)	Political Science
J. T. Montague, M.A. (Tor.)	Commerce
Ross Munro, O.B.E., B.A. (Tor.)	Journalism
John K. B. Robertson, M.A. (Tor.)	Fine Arts
Charles F. Scott, B.A. (Tor.)	Public Law
Frank Shefrin, B.S.A., M.S. (Iowa)	Economics
Gordon Shorter, B.Sc. (Tor.)	Draughting
Alfred Sykes	Journalism
Arthur C. Tuttle, B.Sc.(C.E.) (N.S.T.C.)	Surveying
Charles B. Walker, B.A. (Tor.)	Psychology
George S. Watts, M.A. (Queen's)	Economics
F. E. Whitworth, B.A. (Sask.), A.M., Ph.D. (California)	Psychology
Joseph W. Willard, M.A. (Tor.), M.P.A., A.M. (Harvard)	Social Policy
Alice E. Wilson, B.A. (Tor.), Ph.D. (Chicago)	Palaeontology
Morley E. Wilson, B.A. (Tor.), Ph.D. (Yale), F.R.S.C.	Geology
J. M. Wyatt, M.A. (Tor.)	Philosophy

Summary of Courses Offered

IN THE DAY DIVISION

Courses leading to the degrees of:

Bachelor of Arts

Pass Course, four years from Junior Matriculation (see p. 26).

General Honours Course, five years from Junior Matriculation (see p. 28).

Specific Honours Courses, five years from Junior Matriculation (see p. 29).

Bachelor of Arts in Public Administration

Pass Course, with Certificate in Public Administration, four years from Junior Matriculation (see p. 28).

Honours Course in Public Administration, five years from Junior Matriculation (see p. 31).

Bachelor of Journalism

Four years from Junior Matriculation (see p. 34).

Bachelor of Commerce

Pass Course, four years from Junior Matriculation (see p. 37).

Bachelor of Science

Pass Course, four years from Junior Matriculation (see p. 40).

Specific Honours Courses, five years from Junior Matriculation (see p. 41).

Courses leading to:

Diploma in Engineering

Two years from Senior Matriculation or equivalent standing, or three years from Junior Matriculation.

Students completing the Engineering course at Carleton College may, if recommended, be admitted to the third year of Engineering courses at McGill University, Queen's University or The University of Toronto, where they may qualify in two additional years for a degree in Engineering. (See p. 44)

Alternatively, students completing the Engineering course at Carleton College may transfer to the course leading to the degree of Bachelor of Science with Honours in Applied Physics, which involves two additional years of study in Carleton College. (See p. 43)

Certificate in Public Administration

Graduates of recognized universities or colleges may be admitted to a course leading to the separate award of the Certificate in Public Administration, ordinarily a two-year programme. (See p. 28)

IN THE EVENING DIVISION

Courses leading to the degrees of:

Bachelor of Arts

Pass Course, involving the completion of twenty subjects after Junior Matriculation. Two subjects may be taken in each winter session and one in each summer session. (See p. 26)

Bachelor of Arts in Public Administration

Pass Course, with Certificate in Public Administration, involving the completion of twenty subjects after Junior Matriculation. (See p. 28)

Bachelor of Commerce

A course involving the completion of twenty subjects after Junior Matriculation. (Not all subjects pertinent to the last half of the course are available for 1948-49, but will be offered in future years as required.) (See p. 37)

Bachelor of Science

Pass Course, involving the completion of twenty subjects after Junior Matriculation. (Not all subjects pertinent to the last half of the course are available for 1948-49, but will be offered in future years as required.) (See p. 40)

Course leading to:

Certificate in Public Administration

Graduates of recognized universities or colleges may be admitted to a course leading to the separate award of the Certificate in Public Administration, involving the completion of from five to ten subjects in that field. (See p. 28)

Courses for those who are not degree candidates:

Subjects in the degree courses are open to persons who do not wish to study for a degree, providing that they have the required background for the courses they choose. (See pp. 49 ff.).

In the Department of General Education non-degree courses in subjects of cultural and vocational value are open without specific admission requirement to members of the public. (See the special bulletin issued by the Department of General Education.)

General Information

How to Register

New students in the day division will take all of these steps.

Returning students in the day division will take steps 1, 3 and 4.

New students in the evening division will take steps 1, 2 and 4, unless they are not candidates for a degree, in which case they will omit step 2.

Returning students in the evening division will take steps 1 and 4.

1. Complete application for admission on form available from the Registrar's Office. Applications should be submitted to the Registrar well in advance of term opening.
2. Attach certificates of former schooling (Junior Matriculation and any studies pursued subsequently) to application for admission, or arrange for such to be sent to the Registrar.
3. When application has been approved, (a) arrange for physical examination by own physician and (b) have him report results to the College on the health report form available from the Registrar's Office. This report should be completed and submitted to the College before final registration.
4. During the appropriate registration period specified under The Academic Year (p. 3), come to the College to (a) arrange final selection of subjects, (b) complete registration forms, and (c) pay fees.

College Office Hours

From September 1st to May 31st, offices are open at the following times:

Monday to Friday	9:00 a.m. to 12:30 p.m.
	2:00 p.m. to 9:00 p.m.
Saturday	9:00 a.m. to 12:30 p.m.

From June 1st to August 31st, offices are open at the following times:

Monday and Thursday	9:00 a.m. to 12:30 p.m.
	2:00 p.m. to 5:00 p.m.
	7:00 p.m. to 9:00 p.m.
Tuesday, Wednesday and Friday	9:00 p.m. to 12:30 p.m.
	2:00 p.m. to 5:00 p.m.
Saturday	Closed all day

Class Hours

Most day classes meet for one hour three times a week. Those involving laboratory work usually meet for that purpose for an additional two- or three-hour period one afternoon a week.

Officers of Administration

President

MURDOCH MAXWELL MACODRUM,
B.A. (Dal.), M.A. (McGill), Ph.D. (Glasgow)

Registrar and Director of Student Personnel Services

EDWARD FLETCHER SHEFFIELD, M.A. (McGill)

Assistant Registrar

ELIZABETH M. BUCKLEY, B.A. (Queen's)

Personnel Assistant

GRACE E. MAYNARD

Director of Athletics

WILBUR T. NIXON

Medical Adviser

ERIC L. DAVEY, M.D., D.P.H. (Tor.)

Bursar

FREDERICK JAMES TURNER, B.Com., M.A. (Tor.)

Accountant

ELIZABETH M. MEIKLE

Librarian

HILDA G. GIFFORD, B.A., B.L.S. (McGill)

Officers of Instruction

SUMMER 1948

- A. Munro Beattie, B.A. (Tor.),
Lecturer in English
Charlotte Brown, B.A. (Tor.),
Assistant in English
Dorothy Chamberlin, M.A. (McGill),
Assistant in English
John Garner, B.A. (Tor.),
Lecturer in Political Science
Adélar Gascon, M.A., Ph.D. (Ottawa), B.Paed. (Montréal),
Sessional Lecturer in French
David Ivor, M.A. (Western), Ph.D. (London),
Sessional Lecturer in Economics
Carson E. Johnson, M.A. (Western),
Sessional Lecturer in Psychology
John W. Mayne, B.Sc., M.A. (Acadia), M.Sc. (Brown),
Lecturer in Mathematics
Charles E. McGaughey, M.A. (Queen's),
Sessional Lecturer in Political Science
Violet M. Nelson, B.A. (Queen's),
Sessional Lecturer in History
Samuel Trachtenberg, B.A. (Man.), M.A. (Tor.),
Sessional Lecturer in Economics
J. M. Wyatt, M.A. (Tor.),
Sessional Lecturer in Philosophy

WINTER 1948-49

Full-time Instructors

- Peter V. Alexander, B.A. (Queen's),
Sessional Lecturer in English
A. Munro Beattie, B.A. (Tor.),
Assistant Professor of English
Charlotte Brown, B.A. (Tor.),
Assistant in English
Dorothy Chamberlin, M.A. (McGill),
Assistant in English
T. James S. Cole, B.Sc. (London),
Demonstrator in Physics
Gordon S. Couse, B.A. (McMaster),
Lecturer in History

- H. Jack Duffus, B.A.Sc. (U.B.C.),
Lecturer in Physics
- Wilfrid Eggleston, M.B.E., B.A. (Queen's),
Professor of Journalism and Director of the Department
- Willard H. Ellis, B.A. (Queen's),
Sessional Demonstrator in Chemistry
- David M. L. Farr, B.A. (U.B.C.), M.A. (Tor.),
Lecturer in History
- Agnes Y. Fleming, B.Com., B.Ed. (Alta.),
Lecturer in Commerce
- Paul W. Fox, M.A. (Tor.),
Lecturer in Political Science
- M. Mercedes French, B.A. (Tor.),
Lecturer in Spanish
- R. Bruce Gamble, B.Sc. (McGill),
Sessional Lecturer in Mathematics
- James A. Gibson, B.A. (U.B.C.), B.A., B.Litt., D.Phil. (Oxon.),
Associate Professor of History
- H. Scott Gordon, B.A. (Dal.), M.A. (Columbia),
Assistant Professor of Economics
- James M. Holmes, B.Sc. (U.N.B.), M.A. (Western), Ph.D. (McGill),
Lecturer in Chemistry
- Doris I. Inch, M.A. (Tor.),
Lecturer in Spanish
- G. Ross Love, M.A. (Western), Ph.D. (Tor.),
Assistant Professor of Physics
- Frank MacKinnon, B.A. (McGill), M.A. (Tor.),
Assistant Professor of Political Science
- M. M. MacOdrum, B.A. (Dal.), M.A. (McGill), Ph.D. (Glasgow),
Lecturer in English
- M. S. Macphail, B.A. (Queen's), M.A. (McGill), Ph.D. (Oxon.),
Associate Professor of Mathematics
- John W. Mayne, B.Sc., M.A. (Acadia), M.Sc. (Brown),
Lecturer in Mathematics
(On leave of absence for graduate study, session 1948-49)
- C. G. Stewart McKeown, M.A. (Tor. and Princeton),
Lecturer in Philosophy
- Henry Montgomery, B.A. (Cantab.),
Lecturer in Chemistry
- T. F. Morris, M.A., Ph.D. (Tor.),
Lecturer in Mathematics

- John M. Morton, M.Sc. (Dal.), Ph.D. (Princeton),
Assistant Professor of Chemistry
- Allan M. Munn, B.Sc. (Queen's), M.Sc., Ph.D. (McGill),
Assistant Professor of Physics
- Herbert H. J. Nesbitt, B.A. (Queen's), M.A., Ph.D. (Tor.),
Assistant Professor of Biology
- Lorne N. Richardson, M.A. (Tor.), M.Sc. (McGill),
Professor of Mathematics and Director of Science Studies
- Donald M. Shepherd, M.A. (Queen's),
Lecturer in Classics
- Ernest W. Stedman, C.B., O.B.E., M.I.C.E., M.E.I.C., F.R.Ae.S.,
F.I.Ae.S., M.I.M., A.R.C.Sc.,
Assistant Professor of Engineering
- J. S. Tassie, B.A. (McMaster), M.A. (Tor.),
Lecturer in French
- C. W. Taylor,
Sessional Instructor in Draughting
- Frederick J. Turner, B.Com., M.A. (Tor.),
Assistant Professor of Commerce
- William P. Wilgar, B.A. (Queen's), M.A. (Cantab.),
Assistant Professor of English
- J. Perry Young, B.A. (Queen's), D. ès L. (Bordeaux),
Lecturer in French

Sessional Lecturers, Part-Time

- Gordon A. Adams, B.A. (Queen's), M.Sc. (Western),
Ph.D. (Chicago).....Biochemistry
- F. J. Alcock, B.A. (Tor.), Ph.D. (Yale), F.R.S.C.....Geology
- A. J. Bénéteau, B.A. (Queen's), Ph.D. (Ottawa).....French
- Charles W. Bishop, B.A. (Tor.), M.A. (Columbia),
D.D. (Hon. Queen's).....Religious
Knowledge
- V. E. Bullock, M.A. (Queen's), A.C.I.C.....Chemistry
- W. L. Cassells, B.Sc. (McGill), M.E.I.C.....Surveying
- H. N. Corbett, B.Com. (Queen's).....Accounting
- Murray E. Corlett, B.A. (Tor.).....Commercial
Law
- H. H. Coulson, M.A. (Cantab.).....Economics
- Alan Deakin, B.S.A. (McGill),
M.S., Ph.D. (Wisconsin).....Biology
- Walter E. Duffett, B.Com. (Tor.),
M.Sc. (Econ.) (London).....Economics
- Florence S. Dunlop, B.A. (Queen's),
M.A., Ph.D. (Columbia).....Psychology

James M. Harrison, B.Sc. (Man.), Ph.D. (Queen's)	Geology
Gordon F. Henderson, B.A. (Tor.)	Public Law
Richard Hoff, LL.D. (Breslau)	German
C. Y. Hopkins, M.A. (Queen's), Ph.D. (New York)	Chemistry
E. R. Hopkins, B.A. (Tor. and Oxon.), LL.B. (Sask.)	Public Law
James Willis Howard, B.S.A. (Tor.), Ph.D. (Cornell), F.B.Ps. S.	Psychology
R. H. Hubbard, B.A. (McMaster), A.M., Ph.D. (Wisconsin)	Fine Arts
Flora E. Hurst, B.A. (U.B.C.), M.A. (Bryn Mawr)	Social Policy
Claude Isbister, B.A. (Man.), A.M., Ph.D. (Harvard)	Economics
Nathan Keyfitz, B.Sc. (McGill)	Statistics
Danilo I. Lalkow, M.D. (Moscow)	Russian
R. W. Lawson, B.A. (Man.), B.A., M.A. (Oxon.)	Economics
J. Douglas Leechman, B.Sc. (St. Patrick's), M.A., Ph.D. (Ottawa)	Journalism
Harold E. MacLean	Draughting
Robert G. McCorkle, B.Acc. (Sask.), C.A.	Accounting
Robert Alexander MacKay, B.A. (Tor.), Ph.D. (Princeton), F.R.S.C.	Political Science
N. L. McKellar, B.A., B.Com. (U.B.C.)	Social Policy
J. M. McQueen, M.A. (Tor.)	History
Myron MacTavish, Mus.B. (Tor.), L.T.C.M., F.A.G.O., Chm., F.C.C.O.	Music
L. R. Merkley, M.A. (Queen's), B.Paed. (Tor.)	Biology
L. W. Moffit, B.A. (Tor.), Ph.D. (Edin.)	Political Science
J. T. Montague, M.A. (Tor.)	Commerce
Ross Munro, O.B.E., B.A. (Tor.)	Journalism
John K. B. Robertson, M.A. (Tor.)	Fine Arts
Charles F. Scott, B.A. (Tor.)	Public Law
Frank Shefrin, B.S.A., M.S. (Iowa)	Economics
Gordon Shorter, B.Sc. (Tor.)	Draughting
Alfred Sykes	Journalism
Arthur C. Tuttle, B.Sc. (C.E.) (N.S.T.C.)	Surveying
Charles B. Walker, B.A. (Tor.)	Psychology
George S. Watts, M.A. (Queen's)	Economics
F. E. Whitworth, B.A. (Sask.), A.M., Ph.D. (California)	Psychology
Joseph W. Willard, M.A. (Tor.), M.P.A., A.M. (Harvard)	Social Policy
Alice E. Wilson, B.A. (Tor.), Ph.D. (Chicago)	Palaeontology
Morley E. Wilson, B.A. (Tor.), Ph.D. (Yale), F.R.S.C.	Geology
J. M. Wyatt, M.A. (Tor.)	Philosophy

Summary of Courses Offered

IN THE DAY DIVISION

Courses leading to the degrees of:

Bachelor of Arts

Pass Course, four years from Junior Matriculation (see p. 26).

General Honours Course, five years from Junior Matriculation (see p. 28).

Specific Honours Courses, five years from Junior Matriculation (see p. 29).

Bachelor of Arts in Public Administration

Pass Course, with Certificate in Public Administration, four years from Junior Matriculation (see p. 28).

Honours Course in Public Administration, five years from Junior Matriculation (see p. 31).

Bachelor of Journalism

Four years from Junior Matriculation (see p. 34).

Bachelor of Commerce

Pass Course, four years from Junior Matriculation (see p. 37).

Bachelor of Science

Pass Course, four years from Junior Matriculation (see p. 40).

Specific Honours Courses, five years from Junior Matriculation (see p. 41).

Courses leading to:

Diploma in Engineering

Two years from Senior Matriculation or equivalent standing, or three years from Junior Matriculation.

Students completing the Engineering course at Carleton College may, if recommended, be admitted to the third year of Engineering courses at McGill University, Queen's University or The University of Toronto, where they may qualify in two additional years for a degree in Engineering. (See p. 44)

Alternatively, students completing the Engineering course at Carleton College may transfer to the course leading to the degree of Bachelor of Science with Honours in Applied Physics, which involves two additional years of study in Carleton College. (See p. 43)

Certificate in Public Administration

Graduates of recognized universities or colleges may be admitted to a course leading to the separate award of the Certificate in Public Administration, ordinarily a two-year programme. (See p. 28)

IN THE EVENING DIVISION

Courses leading to the degrees of:

Bachelor of Arts

Pass Course, involving the completion of twenty subjects after Junior Matriculation. Two subjects may be taken in each winter session and one in each summer session. (See p. 26)

Bachelor of Arts in Public Administration

Pass Course, with Certificate in Public Administration, involving the completion of twenty subjects after Junior Matriculation. (See p. 28)

Bachelor of Commerce

A course involving the completion of twenty subjects after Junior Matriculation. (Not all subjects pertinent to the last half of the course are available for 1948-49, but will be offered in future years as required.) (See p. 37)

Bachelor of Science

Pass Course, involving the completion of twenty subjects after Junior Matriculation. (Not all subjects pertinent to the last half of the course are available for 1948-49, but will be offered in future years as required.) (See p. 40)

Course leading to:

Certificate in Public Administration

Graduates of recognized universities or colleges may be admitted to a course leading to the separate award of the Certificate in Public Administration, involving the completion of from five to ten subjects in that field. (See p. 28)

Courses for those who are not degree candidates:

Subjects in the degree courses are open to persons who do not wish to study for a degree, providing that they have the required background for the courses they choose. (See pp. 49 ff.).

In the Department of General Education non-degree courses in subjects of cultural and vocational value are open without specific admission requirement to members of the public. (See the special bulletin issued by the Department of General Education.)

General Information

How to Register

New students in the day division will take all of these steps.

Returning students in the day division will take steps 1, 3 and 4.

New students in the evening division will take steps 1, 2 and 4, unless they are not candidates for a degree, in which case they will omit step 2.

Returning students in the evening division will take steps 1 and 4.

1. Complete application for admission on form available from the Registrar's Office. Applications should be submitted to the Registrar well in advance of term opening.
2. Attach certificates of former schooling (Junior Matriculation and any studies pursued subsequently) to application for admission, or arrange for such to be sent to the Registrar.
3. When application has been approved, (a) arrange for physical examination by own physician and (b) have him report results to the College on the health report form available from the Registrar's Office. This report should be completed and submitted to the College before final registration.
4. During the appropriate registration period specified under The Academic Year (p. 3), come to the College to (a) arrange final selection of subjects, (b) complete registration forms, and (c) pay fees.

College Office Hours

From September 1st to May 31st, offices are open at the following times:

Monday to Friday	9:00 a.m. to 12:30 p.m.
	2:00 p.m. to 9:00 p.m.
Saturday	9:00 a.m. to 12:30 p.m.

From June 1st to August 31st, offices are open at the following times:

Monday and Thursday	9:00 a.m. to 12:30 p.m.
	2:00 p.m. to 5:00 p.m.
	7:00 p.m. to 9:00 p.m.
Tuesday, Wednesday and Friday	9:00 p.m. to 12:30 p.m.
	2:00 p.m. to 5:00 p.m.
Saturday	Closed all day

Class Hours

Most day classes meet for one hour three times a week. Those involving laboratory work usually meet for that purpose for an additional two- or three-hour period one afternoon a week.

Most evening classes in the winter session meet for one two-hour period, 6 to 8 p.m. or 8 to 10 p.m., once a week. Those involving laboratory work usually meet for that purpose for an additional two-hour period on another evening each week.

Each summer session class meets for two and one-half hours on each of two evenings a week.

Class timetables are published separately for the day and evening divisions, and may be obtained from the Registrar's Office.

Facilities

The College is housed in a four-storey brick building, set on a small campus in the Glebe, one of Ottawa's residential districts, about ten minutes by street car or bus from the centre of the City.

In addition to classrooms and seminar rooms, facilities include a small but growing library; engineering, chemistry, biology, geology and physics laboratories; an audio-visual aids centre including equipment for sound motion picture projection, film-strip and slide projection, and radio workshop activities; a canteen, serving snacks and full-course meals; an assembly hall, equipped for stage productions. Nearby is a three-storey student activities building which provides accommodation for Student Association offices, "*The Carleton*" (student weekly newspaper), games rooms, darkrooms, club rooms and a student lounge. Athletic activities are carried on in the gymnasiums and playing fields of Lansdowne Park about six blocks from the College, and on the campus where the College has its own hockey and skating rink.

Student Activities

All students in the day and evening divisions of the College are members of, and pay the fees set by, the Students' Association. The Students' Council, executive body of the Association, is elected by the students in the spring of each year.

Activities sponsored by the Students' Association, through its Council, include the publication of a weekly newspaper, "*The Carleton*"; dances and parties, bridge and chess tournaments; a camera club, dramatics groups and a radio workshop; welfare fund campaigns; and a wide variety of educational and recreational programmes.

Assisted by the Director of Athletics and competent coaches, the Students' Association conducts an extensive sports programme, including both intramural and intercollegiate athletics: football, hockey, basketball, swimming, ski-ing, badminton, volleyball, table tennis.

Student Services

Health. Under the supervision of the College Medical Adviser a health service is being inaugurated for the year 1948-49. Every day

student will be required to undergo a physical examination by his own physician before entry in the fall term, and to have the results of that examination reported by the physician to the College on a form available from the Registrar's Office. During the fall term arrangements will be made by the College for the testing of all students, in both day and evening divisions, for evidence of tuberculosis. Students wishing to participate in athletics will be required to obtain a certificate of fitness from the Medical Adviser. Emergency treatment will be made available, and the College will be guided in its counsel with students by the advice of the Medical Adviser. The health service is stated on p. 19.

Employment. A student placement service operates from the Registrar's Office of the College. Acting in co-operation with the National Employment Service, the College Placement Service offers assistance to students in obtaining part-time employment during the academic year, full-time employment during the summer vacation period and permanent employment upon graduation.

Housing. A housing registry is maintained in the office of the Registrar, offering assistance to students wishing rooms or rooms with board while in attendance at the College. As far as possible, accommodation listed is inspected by a representative of the College. The College has no dormitories of its own.

Food. A canteen is located in the main College building, serving snacks and full-course meals. Several restaurants are within easy access of the College.

Counselling and Guidance. Members of the administrative and instructional staffs of the College are anxious to be of maximum assistance to students in their planning of educational programmes, their choice of careers and in the solution of their personal problems. A library of occupational information is at the disposal of students. The counselling services of the Department of Veterans Affairs are available to student veterans.

Fees

Tuition Fees

In courses other than Engineering:

- | | |
|--|---------|
| (a) Tuition, per subject, for two terms..... | \$40.00 |
| (b) Additional for each subject involving
laboratory work, for two terms..... | 15.00 |

e.g. A full-time day student taking five subjects, one of them involving laboratory work, would pay tuition mounting to \$215.

A part-time evening student taking two subjects, one of them involving laboratory work, would pay tuition amounting to \$95.

Engineering:

- | | |
|--|--------|
| (a) Tuition, per year of two terms..... | 275.00 |
| (b) Additional for summer survey camp, payable at end of first year..... | 25.00 |

Health Service Fee

- | | |
|--|------|
| Payable by each day student, per year..... | 2.00 |
|--|------|

Students' Association Fees

- | | |
|--|-------|
| (a) Full-time students, per year..... | 13.00 |
| (b) Part-time students, per subject..... | 2.00 |

Examination Fees

- | | |
|--|------|
| (a) Supplemental examination, at Carleton
College, per paper..... | 3.00 |
| Supplemental examination, written elsewhere, per paper..... | 5.00 |
| (b) Special examination, per paper..... | 5.00 |

Graduation Fee

- | | |
|--|-------|
| Payable on or before April 1st of graduating
year | 10.00 |
|--|-------|

Deferred Payment Fee (to cover bookkeeping costs)

Payable when fees are paid in instalments:

- | | |
|---|------|
| (a) When fees total \$50 or less..... | 3.00 |
| (b) When fees total more than \$50..... | 5.00 |

For fee payment plans, see p. 20.

Fees may be paid by any one of the following plans:

1. Payment in full at the time of registration.
2. Payment in *two* instalments:
 - (a) At registration— $\frac{1}{2}$ of the total tuition, *plus* Health Service Fee (where applicable), Students' Association Fee, and Deferred Payment Fee (see above).
 - (b) On or before January 15th—the remaining half of the total tuition fee.
6. Payment in *six* instalments:
 - (a) At registration— $\frac{1}{6}$ of the total tuition, *plus* Health Service Fee (where applicable), Students' Association Fee, and Deferred Payment Fee (see above).
 - (b) On the 15th of October, November, December, January and February— $\frac{1}{6}$ of the total tuition fee.

FINANCIAL AID FOR STUDENTS

Scholarships

Ottawa Business and Professional Women's Club Scholarship.

Value \$75.00. Awarded annually to the girl entering Carleton College with the highest matriculation standing from Ottawa colleges and high schools.

Rotary Club of Ottawa Scholarships.

One of \$200.00 awarded annually to a student of outstanding ability proceeding from the second to the third year of courses in Carleton College.

One of \$200.00, awarded annually to a student of outstanding ability proceeding from the third to the fourth year of courses in Carleton College.

Three of \$400.00 each, awarded annually to students from Ottawa schools entering a college or university in Ottawa. One or more of these may be held at Carleton College.

Ottawa Women's Canadian Club War Memorial Scholarship.

Value \$100.00. Awarded annually to a student progressing from first to second year in Carleton. Preference is given to veterans.

Dominion-Provincial Student-Aid Scholarships and Bursaries.

Scholarships and bursaries of up to \$400.00 each, tenable at the various colleges and universities of Ontario, including Carleton College. They are awarded to "students of good character, whose health and physical fitness are satisfactory, who meet the required academic standing, and

who, without financial assistance, could not continue their formal education." In the year 1947-48, six Carleton students received aid from this source.

Lions Club of Ottawa Scholarships.

Value, up to \$400.00 each. Awarded annually to Ottawa students who, without financial assistance, could not continue their formal education. These may be held at Carleton College. Two winners of these scholarships attended Carleton in the year 1947-48.

Mercy Neal Southam Entrance Scholarships.

Beginning in the Fall of 1949, six scholarships, each of \$500.00, will be awarded annually, to students entering the second year of Arts, Journalism, Commerce or Science, or the first year of Engineering, at Carleton College. One will be awarded, if merited, to the student with highest standing from each of the following: Glebe Collegiate Institute, Lisgar Collegiate Institute, Nepean High School, Ottawa High School of Commerce, Ottawa Technical High School, and the first year of Carleton College.

Funds for three of these scholarships are endowed by bequest of the late Wilson Mills Southam. The other three will be provided by his brother, Harry Stevenson Southam, C.M.G. The scholarships are in memory of their grandmother, Mercy Neal Southam.

Prizes

B'nai B'rith Award.

Value \$25.00. Awarded annually for the best examination in any department of the College.

Faculty Club Prize.

Awarded occasionally by the Faculty Club of Carleton College to a student chosen by the President of the College.

Bursaries

Canadian Women's Press Club (Ottawa Branch) Bursary.

Value \$50.00. Available to give financial assistance to a student in Journalism.

Ottawa Superfluity Shop Bursaries.

An annual sum of approximately \$180.00 is available to provide bursaries for veterans of World War I or World War II, or for the descendants of such veterans, who are students in good standing at Carleton College and in need of financial assistance.

Ottawa Citizens War Services Committee Bursaries.

An annual sum of approximately \$60.00 is available to assist veterans, their dependents or descendants, who are students in good standing at Carleton College and are in need of financial assistance.

Loan Funds

The college administers several small but growing loan funds which are available for short and long term loans to students in need of temporary financial aid.

Further information regarding these sources of financial aid may be had from the Director of Student Personnel Services.

WITHDRAWAL AND REFUND

Students who are forced to withdraw from a course, or from the College, are required to notify the Registrar in writing and to give their reasons for withdrawal. As the College assumes the obligation of carrying the student throughout the year the student registers, and provides the instruction and accommodation on a yearly basis, the Board of Governors has ruled as follows:

- (1) Application for withdrawal must be presented within thirty days after discontinuing attendance.
- (2) All tuition credits and refunds shall be made entirely at the pleasure of the College.
- (3) Credits or refunds will be granted only as follows:
 - (a) Cash refunds may be granted in cases where students are compelled to withdraw on account of serious and continued personal illness. The application must be accompanied by a certificate from a physician, satisfactory to the College.
 - (b) In case a student who is regularly employed during the day is sent out of the city permanently by his employer or compelled so to change his working hours as to prevent his continuing at the College, a refund may be granted, provided the application is accompanied by a statement from the employer, satisfactory to the College.
- (4) Tuition not refunded or used may, if a certificate of credit is secured from the Bursar, be applied upon subsequent courses pursued in the College, provided such courses are taken within two years of the date of withdrawal of the student.

General Regulations

Attendance

A student is expected to attend all lectures, discussion groups, seminars and laboratory periods of any course in which he is registered, whether such periods of work are formally scheduled by the College Registrar or informally announced by the instructor.

The Faculty may, at any time, either during the term or after the close of the term, request any student to withdraw from the College if his conduct, attendance, work or progress is deemed unsatisfactory.

Standing

A student's standing in his year's work will be determined not only by the results of mid-year and final examinations, but also by the work of the whole term or session, including consideration of class tests, laboratory work, essays, attendance, progress and any other matters bearing on the candidate's worth as a student of the College.

Except in the course leading to the Diploma in Engineering (see below), standing in each course is graded by the letters A, B, C, D (all unconditional passing grades) or F (failure). For the purpose of determining a student's average standing, a point value is assigned to each of these letter grades: A = 4, B = 3, C = 2, D = 1, F = 0.

To receive credit toward a degree a candidate must obtain at least a "D" grade in the work of each course. In order to receive second class standing in his year's work, a student must have obtained an average of at least 2.4 grade points. In order to receive first class standing in his year's work, he must have obtained an average of at least 3.4 grade points. Additional regulations regarding required standing are stated in the outlines of the various degree programmes, pp. 25-46.

In the course leading to the Diploma in Engineering, the standing in each course is graded as I (first class standing, 80-100%), II (second class standing, 65-79%), III (third class standing, 50-64%) or "F" (failure, below 50%). To receive credit toward the Diploma a candidate must obtain at least third class standing in the work of each course.

A candidate must obtain complete standing in first year before registering in the third year, and complete standing in the second year before registering in the fourth year of any course.

A full-time student may take a summer session course for credit towards a degree only if such credit is needed to make up a deficiency. He may take a summer course as an extra for no degree credit.

Examinations

Mid-year and final examinations are held in all courses, at the times listed under The Academic Year, p. 3.

A student who fails to write the mid-year or final examinations in any course must make satisfactory explanation to the Committee on Studies not later than one week after the day on which the examination was held if he is to receive consideration for credit or a grade in the course in which the examination was missed.

A student who, because of illness, has failed to write the mid-year or final examination in any course may, upon presentation to the Committee on Studies of a satisfactory certificate from his attending physician or surgeon, apply for *aegrotat* standing or for permission to write a special examination.

No candidate shall be admitted to an examination room more than thirty minutes after the beginning of the examination. No candidate shall be permitted to take any books or papers into an examination room except by express direction of the instructor in charge of the examination room.

Supplemental examinations. Supplemental examinations are held at the time listed under The Academic Year, p. 3. Fees are shown on p. 19.

No supplemental examinations are given in courses beyond the first three courses of a major or minor subject for a degree with specific honours, nor in courses beyond the first three courses in a continuation subject for a degree with general honours.

A student who does not write the final examination in any course is not eligible to write the supplemental examination in that course except by permission of the Committee on Studies.

A student taking five subjects who fails in more than two subjects will not be permitted to write supplemental examinations and will be considered to have failed his year. He will retain credit only in those subjects in which he may have obtained "C" or higher standing. A student taking fewer than five subjects who fails in more than one subject will not be permitted to write supplemental examinations.

If a supplemental examination is failed, the student will be required to repeat the course before coming up for examination in that course in any subsequent year.

A student who applies for and is granted permission to rewrite a subject for higher standing must do so within one calendar year after passing that subject.

Special examinations. A student who, for any reason, has not written a mid-year or final examination on the appointed date may be required to take a special examination. For fee, see p. 19.

Details of Courses Offered

ARTS

Admission Requirements

- (a) *To the First Year* of courses leading to the Bachelor of Arts degree:

Junior Matriculation—the Ontario Secondary School Graduation Diploma in the General Course (Grade XII), or an equivalent certificate*, with the required standing in the following subjects:

1. English
2. Mathematics (Algebra and Geometry)
3. History
4. A language other than English
5. A science (Physics and Chemistry; or Agriculture, Parts I and II)
6. Any *one* of: Music, Art, Household Science, Commercial Work, Geography, Shop Work, an additional language.

*The following certificates, recognized as equivalent to the Ontario Secondary School Graduation Diploma, may be accepted for admission to first year if the subjects taken meet the requirements set out above:

Alberta	Junior Matriculation (Grade XI)
British Columbia	Junior Matriculation (Grade XII)
Manitoba	Grade XI
New Brunswick	Junior Matriculation
Newfoundland	Associate (Junior)
Nova Scotia	Grade XI (average 60, minimum 50)
Prince Edward Island	First Class Licence; or Second Year Certificate from Prince of Wales College
Quebec	The Quebec High School Leaving Certificate; McGill University Junior Matriculation
Saskatchewan	Grade XI.

- (b) *To the Second Year* of courses leading to the Bachelor of Arts degree:

Senior Matriculation—A candidate for admission to second year must have passed the examinations of first year, or of Ontario Grade XIII, or the equivalent examinations** of other recognized examining bodies in the following subjects:

1. English Composition and Literature
2. Latin or Mathematics (two of Algebra, Geometry, Trigonometry)

3. A language other than English
4. A science (Physics or Chemistry or Biology)
(In special circumstances a language may be offered instead of the science requirement on condition that the science subject must be taken in a subsequent year).
5. An additional subject. (Students who do not offer History must take a course in History in a succeeding year).

**The following certificates, recognized as equivalent to the Ontario Grade XIII certificate in the subjects in which at least 50% has been made in each paper, may be accepted for admission to second year if the subjects taken meet the requirements set out above:

Alberta	Senior Matriculation (Grade XII)
British Columbia	Senior Matriculation (Grade XIII)
Manitoba	First Class
New Brunswick	Grammar School or First Class Licences
Newfoundland	Associate (Senior)
Nova Scotia	Grade XII
Prince Edward Island	Honour Diploma of Third Year, Prince of Wales College
Quebec	Senior High School Leaving Certificate; McGill University Senior Matriculation.
Saskatchewan	Grade XII

(c) *To the Third or subsequent years* of courses leading to the Bachelor of Arts degree:

Applications for admission to the third or subsequent years will be evaluated on their merits and advanced standing granted for studies undertaken elsewhere only when these are recognized as the equivalent of subjects offered in Carleton College. Every student admitted with advanced standing will be required to complete at least his last five courses in Carleton College.

Course Requirements

- *Bachelor of Arts—Pass Course* (Offered in both day and evening divisions)

Length of course. Candidates for the Pass B.A. degree will take a total of twenty courses after Junior Matriculation, or fifteen after Senior Matriculation.

In the day division five courses will be taken in each of four years. No more than five courses may be taken in any academic year, unless by permission of the Committee on Studies.

In the evening division students may take one or two courses in each winter session and one course in each summer session. No more than two courses may be taken in a winter session and no more than one in a summer session, unless by permission of the Committee on Studies.

Course selection. Courses will be selected from those listed under Details of Subjects, pp. 49 ff., as follows:

FIRST YEAR

1. English 1 or 11 (English 10 also may be required)
2. Latin 1 or Mathematics 1 (two of Algebra, Geometry, Trigonometry)
3. A language other than English (a course numbered 1 or higher)
4. A science (Physics 1 or Chemistry 1 or Biology 1 or 11) (In special circumstances a language may be substituted for the science requirement on condition that the science subject must be taken in a subsequent year).
5. An additional subject.
(Students who do not take History in the first year must take a course in History in a succeeding year. Students intending to proceed to an honours course in a language and literature are advised to offer two languages other than English).

SECOND YEAR

1. English 2 or 4.
2. A further course in the language studied in first year.
3. Philosophy 2, or Mathematics 2, or a further year of work in the science subject studied in first year.
4. One of: Philosophy, Psychology, History, Economics, Political Science.
5. An additional subject.

THIRD AND FOURTH YEARS

Third and fourth year courses may be selected from those for which the candidate has the prerequisites, five courses in each year, subject to the following requirement:

In order to qualify for graduation a candidate must have completed at least three courses in each of three subjects, counting from the commencement of the second year. The choice of these three subjects shall be made at the beginning of the third year.

Standing. General regulation regarding standing are stated on p. 23. In addition, candidates for the Pass B.A. degree must obtain an average of at least 1.5 grade points in the courses taken in Carleton College.

● *Bachelor of Arts with Certificate in Public Administration—Pass Course** (Offered in both day and evening divisions)

A candidate proceeding to the Pass Degree of Bachelor of Arts (see p. 26) may at the same time qualify for the Certificate in Public Administration by taking Political Science, Economics and Public Law as his continuation subjects and including the following courses:

Political Science 1 or 2.....	Introduction to Political Science
Political Science 3.....	Comparative Government
Political Science 6.....	Introduction to Public Administration
Political Science 10.....	The State and Economic Life
Economics 2.....	Principles of Economics
Economics 3.....	Canadian Economic History and Geography
Economics 8.....	Money and Banking
Public Law 1.....	The Elements of Public Law
Public Law 2.....	The Constitutional Law of Canada
Public Law 3.....	Administrative Law

● *Certificate in Public Administration* (Offered in both day and evening divisions)

Students who have already received the Bachelor of Arts or Bachelor of Commerce degree may be admitted to a course leading to the separate award of the Certificate of Public Administration, the work in which covers the equivalent of two academic years.

The required courses are those in Political Science, Economics and Public Law listed above for the degree of Bachelor of Arts with Certificate in Public Administration. Candidates may be given credit in from one to five of these courses if such courses have been included in their undergraduate work.

● *Bachelor of Arts with General Honours* (Offered in day division only)

This course is equal to the Specific Honours B.A. in the quantity and quality of its work but offers the student of ability an opportunity to undertake studies in a wider range of subjects.

Additional admission requirements. Students who have attained at least second class standing in the first and second years of the Pass Course may be enrolled in the third year of the General Honours Course if their subjects taken in the first and second years meet the requirements of the General Honours Course. Students who have attained at least second class standing in the second and third years of the Pass Course

*For course leading to degree of Bachelor of Arts with Honours in Public Administration, see p. 31.

may be enrolled in the fourth year of the General Honours Course if their subjects taken in the first, second and third years meet the requirements of the General Honours Course. No student may move from the Pass Course into the General Honours Course carrying a "condition" in any subject of his previous years.

Length of course. Candidates for the General Honours degree will take a total of twenty-five courses in five years if admitted by Junior Matriculation, or twenty courses in four years if admitted by Senior Matriculation. Not more than five courses may be taken in any academic year, unless by permission of the Committee on Studies.

Course selection. In order to qualify for graduation, a candidate for the General Honours degree must have completed at least four courses in each of three separate fields of study, counting from the commencement of the second year. The choice of these three fields of study shall be made at the beginning of the third year and shall be subject to the approval of the Committee on Studies.

Standing. General regulations regarding standing are stated on p. 23. Additional regulations regarding the standing of candidates for the General Honours degree are as follows.

A student's honours standing in any year's work will be determined by the Committee on Honours.

To receive credit towards the General Honours degree a candidate must obtain at least second class standing in the year's work.

No student may be awarded first class standing in any year's work if he has failed in any subject during the year. For the purposes of this regulation a supplemental examination does not erase a failure.

No student may be awarded a General Honours degree if he has failed in more than three subjects after his admission to second year. For purposes of this regulation a supplemental examination does not erase a failure.

Students who fail to obtain at least second class standing in any year must withdraw from the General Honours Course. Such students may apply for admission to the Pass Course and if accepted must fulfil the requirements of the Pass Course before presenting themselves for the Pass B.A. degree.

To qualify for the degree of B.A. with First Class General Honours a student must have first class standing in the work of his entire course. To qualify for the degree of B.A. with Second Class General Honours a student must have second class standing in the work of his entire course.

- *Bachelor of Arts with Specific Honours* (Offered in day division only)

This course is characterized by strict prescription of studies and

high standards of performance, more especially within those departments in which major and minor subjects have been selected. The Specific Honours Course differs from the General Honours Course not in the quantity or quality of its work but in its intensity of specialization.

Additional admission requirements. Admission to Specific Honours will be granted only with the consent of the department in which the major subject is to be taken. Students who have attained at least second class standing in the work of the first and second years of the Pass Course may be admitted to the third year of a Specific Honours Course. Students who have obtained at least second class standing in the work of the first and second years of the Pass Course, and in the work of the third year of the General Honours Course, may be admitted to the fourth year of a Specific Honours Course. No student carrying a "condition" in the Pass Course or in the General Honours Course will be admitted to a Specific Honours Course. Students who fail in the regular examinations of more than one subject after admission to the second year of the Pass Course will not be admitted to a Specific Honours Course. For the purposes of this regulation, a supplemental examination does not erase a failure.

Length of course. Candidates for the degree of B.A. with Specific Honours will take a total of twenty-five courses in five years if admitted by Junior Matriculation, or twenty courses in four years if admitted by Senior Matriculation. Not more than five courses may be taken in any academic year, unless by permission of the Committee on Studies.

Course selection. A candidate for Specific Honours must, before the beginning of his third year, choose a major subject or field of study and a minor subject of field of study, and in these major and minor subjects or fields of study must take such courses as may be determined by the head of the department in which he is to pursue the work of his major. He must take at least four courses in the minor subject of field of study.

The whole course of a candidate for a Specific Honours degree must be in the beginning discussed with, and thereafter at every stage be approved by, the head of the department in which the candidate chooses his major subject or field of study.

Specific Honours majors are now available in Public Administration (see p. 31), Political Science, History, and English. Other majors will be made available in subsequent years.

Standing. General regulations regarding standing are stated on p. 23. Additional regulations regarding the standing of candidates for a Specific Honours degree are as follows.

A student's honours standing in any year's work will be determined by the Committee on Honours.

To receive credit towards a Specific Honours degree a candidate must obtain at least second class standing on the year's work.

No student may be awarded first class standing in any year's work if he has failed in any subject during the year. No student may be awarded second class standing in any year's work if he has failed in more than one subject during that year. For the purposes of these regulations a supplemental examination does not erase a failure.

No student may be awarded the First Class Honours degree if he has failed in more than one subject during his entire course. No student may be awarded the Second Class Honours degree if he has failed in more than two subjects during his entire course. For the purposes of these regulations a supplemental examination does not erase a failure.

Students who fail to obtain at least second class standing in any year must withdraw from the Specific Honours Course. Such students may apply for admission to the Pass Course.

- *Bachelor of Arts with Honours in Public Administration* (Offered in day division only)

Candidates for the degree of Bachelor of Arts with Honours in Public Administration must satisfy all requirements for the degree of B.A. with Specific Honours, as outlined above, pp. 29-31.

Course selection. The work of this course involves prescribed studies in Political Science, Economics and Public Law, as follows:

FIRST YEAR

The first year of the course leading to the degree of B.A. with Honours in Public Administration will consist of courses selected from those listed under Details of Subjects, pp. 49 ff., as follows:

1. English 1 (English 10 also may be required)
2. Latin 1 or Mathematics 1 (at least two of Algebra, Geometry, Trigonometry; all three if the student intends to proceed in subsequent years to advanced work in Mathematics and Statistics)
3. A modern language other than English (a course numbered 1 or higher)
4. A science (Physics 1 or Chemistry 1 or Biology 1)
5. An additional subject.

SECOND YEAR

1. Political Science 2 (Introduction to Political Science)
2. Economics 2 (Principles of Economics)
3. Public Law 1 (Elements of Public Law)
4. A further course in the modern language studied in first year.

5. One of: English 2
 Philosophy 2
 Psychology 2
 Accounting 2
 Mathematics 2

THIRD YEAR

1. Political Science 3 (Comparative Government)
2. Political Science 6 (Introduction to Public Administration)
3. Economics 3 (Canadian Economic History and Geography)
4. History 3 (New France and British America to 1791)
5. Public Law 2 (The Constitutional Law of Canada)
6. One of: English
 Philosophy
 Psychology
 Accounting
 Mathematics

FOURTH YEAR

1. Political Science 4 (Political Theory)
2. Political Science 7 (Civil Service Principles)
3. Economics 8 (Money and Banking)
4. Public Law 3 (Administrative Law)
5. One of: Psychology 3 (Applied Psychology)
 Psychology 4 (Psychology for Business)
6. One of: English
 Philosophy
 Psychology
 Accounting
 Mathematics
 History

FIFTH YEAR

1. Political Science 10 (The State and Economic Life)
2. Political Science 11 (Seminar in Canadian Government)
3. One of: Public Law 4 (Statutes, Regulations and Orders)
 Public Law 5 (International Law)
- 4.) Two of: Economics 6 (Agricultural Organization and Policy)
- 5.) Economics 7 (International Trade)
 Economics 11 (Public Finance)
 Social Policy 1 (Social Legislation)
 Social Policy 2 (Labour Policy)
 Mathematics 3b (Mathematical Statistics)

6. One of: English
Philosophy
Psychology
Accounting
Mathematics
History

Special Requirements

Regularly throughout the course, candidates will be required to prepare essays and memoranda on various special topics in the field of public administration.

Towards the end of the fifth year, each candidate must present a dissertation on some topic involving independent investigation. The topic should be chosen, in consultation with the head of the department, by the third year, and will be associated with the work of the three final years.

All candidates for the degree of B.A. with Honours in Public Administration will be required to show, by their final year, a reading knowledge of a modern language other than English.

JOURNALISM

● *Bachelor of Journalism* (Offered in day division only)

The course in Journalism is built around the conviction that the best college training for the career of journalist today consists of a good liberal arts education, combined with thorough training in the technical skills of interviewing, reporting, writing and editing. In the United States, with its much longer tradition in education for journalism, the tendency in four-year schools of journalism is to arrange courses so that students spend seventy-five to eighty per cent of their time in acquiring a good background, and only twenty to twenty-five per cent in technical courses. The result, says Frank Luther Mott, director of the University of Missouri School of Journalism, is to give such students "a mind trained and ripened by the liberal discipline—the social sciences, philosophy, mathematics, languages and so on."

While the education of a journalist must stress the art and science of expression (through the spoken as well as the written word), the importance of a writer having something to express cannot be neglected. The good newspaperman is noted for his ability to get information and to see the value of the facts he gets.

The course in Journalism at Carleton College emphasizes liberal scholarship and basic skills, in the belief that there are few practical applications of a specialized nature which cannot be subsequently acquired in a few weeks of actual work. While an array of "shop" courses in practical vocational training might appear to give more immediately useful crafts to the prospective journalist, it is assumed that no amount of "shop" training will carry a "cub" far if he lacks a broad background of liberal education and the intelligence to grasp and report the complex phenomena of modern society.

Admission Requirements

(a) *To the First Year* of the course leading to the Bachelor of Journalism degree:

Requirements are the same as those for admission to the first year of courses leading to the Bachelor of Arts degree (see p. 25).

(b) *To the Second Year* of the course leading to the Bachelor of Journalism degree:

Senior Matriculation—A candidate for admission to second year must have passed the examinations of first year, or of Ontario Grade XIII, or the equivalent examinations (see p. 26) of other recognized examining bodies in the following subjects:

1. English Composition and Literature

2. Latin or Mathematics (two of Algebra, Geometry, Trigonometry)
3. A modern language other than English
4. A science (Physics or Chemistry or Biology)
(In special circumstances a language may be offered instead of the science requirement on condition that the science subject must be taken in a subsequent year.)
5. History

(c) *To the Third and Fourth Years* of the course leading to the Bachelor of Journalism degree:

Undergraduates or graduates applying for admission to advanced standing with allowances on credits gained at their original college or university may be admitted to the third or to the fourth year, if their academic record is accepted as at least equivalent to the completion of second or third year Journalism in Carleton College. Normally, such applicants should offer standing in at least two of the following subjects in their previous work: Canadian History, Psychology, Economics, Political Science. Credit for courses previously taken will be arranged on application, subject to the stipulation that a minimum of a full year's work of at least the last five courses must be taken at Carleton College in order to qualify for the Bachelor of Journalism degree.

NOTE: Journalism students are urged to become reasonably proficient on the typewriter as soon as possible. All assignments in the courses Journalism 1, 2, 3, 4 and 5 (which are taken in the third and fourth years) will be done by typewriter.

Course Requirements

Length of course. Candidates for the Bachelor of Journalism degree must take a total of twenty courses in four years if admitted by Junior Matriculation, or fifteen courses in three years if admitted by Senior Matriculation.

Not more than five courses may be taken in any academic year, unless by permission of the Committee on Studies.

Course selection. The course leading to the degree of Bachelor of Journalism will consist of subjects selected from those listed under Details of Subjects, pp. 49 ff., as follows:

FIRST YEAR

1. English 1 or 11 (English 10 also may be required)
2. Latin 1 or Mathematics 1 (two of Algebra, Geometry, Trigonometry)
3. French 1 (or a course numbered 1 or higher in another language)

4. A science (Physics 1 or Chemistry or Chemistry 1 or Biology 1 or 11)
5. History 1

SECOND YEAR

1. English 2 or 4
2. French 2 (or a further year of work in another language)
3. One of: Economics 2, Political Science 2, Philosophy 2
4. History 3
5. Psychology 2

THIRD YEAR

1. Journalism 1
2. Journalism 2
3. History 13 (or History 3, if not taken in second year)*

*Normally both History 3 and History 13 will be required for a degree in Journalism. History 13 has for a prerequisite History 3 or its equivalent. In special circumstances, History 13 may be taken without the prerequisite, but the Department of History must be satisfied that the applicant has adequate background for the course.

4. One of: Economics 2 (if not taken in second year)
Political Science 2 (if not taken in second year)
An approved English course
5. One of: Economics 3, 5 or 6 (if Economics 2 has been taken previously)
Political Science 3 or 4 (if Political Science 2 has been taken previously)
Social Policy 1 or 2
An approved option

FOURTH YEAR

1. Journalism 3
2. Journalism 4
3. Journalism 5
4. History 13 (or, if taken previously, an approved course in English)
5. One of: Economics 3, 5 or 6 (if Economics 2 has been taken previously)
Political Science 3 or 4 (if Political Science 2 has been taken previously)
Social Policy 1 or 2
An approved option

Standing. General regulations regarding standing are stated on p. 23. In addition, candidates for the B.J. degree must obtain an average of at least 1.5 grade points in the course taken in Carleton College and grades of "C" or better in *each* of Journalism 3, 4 and 5.

COMMERCE

● *Bachelor of Commerce* (Offered in both day and evening divisions)
Admission Requirements

(a) *To the First Year* of the course leading to the Bachelor of Commerce degree:

Requirements are the same as those for admission to the first year of courses leading to the Bachelor of Arts degree (see p. 25).

(b) *To the Second Year* of the course leading to the Bachelor of Commerce degree:

Senior Matriculation—A candidate for admission to second year must have passed the examinations of first year, or of Ontario Grade XIII, or the equivalent examinations (see p. 26) of other recognized examining bodies in the following subjects:

1. English Composition and Literature
2. Mathematics (Algebra or Mathematics of Investment;
Geometry and Trigonometry)
(Accountancy Practice or Secretarial Practice may be offered in lieu of either Geometry or Trigonometry).
3. A modern language other than English
4. A science (Physics or Chemistry or Biology)
5. History

(c) *To the Third and Fourth Years* of the course leading to the Bachelor of Commerce degree:

Applications for admission to the third or fourth years will be evaluated on their merits and advanced standing granted for studies undertaken elsewhere only when these are recognized as the equivalent of subjects offered in Carleton College. Every student admitted with advanced standing will be required to complete at least his last five courses in Carleton College.

Course Requirements

Length of course. Candidates for the Bachelor of Commerce degree must take a total of twenty courses after Junior Matriculation, or fifteen after Senior Matriculation.

In the day division five courses will be taken in each of four years. No more than five courses may be taken in any academic year, unless by permission of the Committee on Studies.

In the evening division students may take one or two courses in each winter session and one course in each summer session. No more than two courses may be taken in a winter session and no more than one in a summer session, unless by permission of the Committee on Studies.

Course selection. Courses will be selected from those listed under Details of Subjects, pp. 49 ff., as follows:

FIRST YEAR

1. English 1 or 11 (English 10 also may be required)
2. Mathematics 1 (Algebra, Geometry and Trigonometry)
3. French 1 or a course numbered 1 or higher in another modern language
4. A science (Physics 1 or Chemistry 1 or Biology 1 or 11)
5. History 1 or 11

SECOND YEAR

1. English 2
2. French 2 or a further year of work in the modern language taken in first year
3. Mathematics 3a and 3b (two half courses)
4. Economics 2
5. Accounting 2
(Students entering second year with at least second class standing in Grade XIII Accountancy Practice may substitute an approved option for Accounting 2).

THIRD YEAR

1. Commerce 1 or Mathematics 2
2. Economics 3
3. Economics 8
4. Accounting 3
5. (a) Economics 13 (half-course)
(b) English 13 (half course)
or a further year of work in the modern language taken in second year
(In 1948-49, students who have not taken Mathematics 3a and 3b will take these two half courses rather than Economics 13.)

FOURTH YEAR

1. Economics 9 or 10
2. One of: History 1
Political Science 4
Philosophy 2
- 3.) Three of: Accounting 4
- 4.) Accounting 6
- 5.) Commerce 2
Commerce 3

Commerce	4
Commerce	5
Commerce	6
Economics	6
Economics	7
Economics	11
Journalism	2
Journalism	3
Psychology	2
Psychology	4
Mathematics	13

Standing. General regulations regarding standing are stated on p. 23. In addition, a candidate for a degree in Commerce who fails to secure an average of least 1.6 grade points in the first or second year or 1.8 in the third or fourth year will be required to withdraw from the Commerce course. Such students may apply for admission to the Pass B.A. course and if accepted must fulfil the requirements of that course in order to qualify for the Pass B.A. degree.

SCIENCE

Admission Requirements

(a) *To the First Year* of courses leading to the Bachelor of Science degree:

Requirements are the same as those for admission to the first year of courses leading to the Bachelor of Arts degree (see p. 25).

(b) *To the Second Year* of courses leading to the Bachelor of Science degree:

Senior Matriculation—A candidate for admission to second year must have passed the examinations of first year, or of Ontario Grade XIII, or the equivalent examinations (see p. 26) of other recognized examining bodies in the following subjects:

1. English Composition and Literature
2. Mathematics (Algebra, Geometry and Trigonometry)
3. A language other than English
- 4.) Two of: Physics, Chemistry, Biology
- 5.)

(c) *To the Third or subsequent years* of courses leading to the Bachelor of Science degree:

Applications for admission to the third or subsequent years will be evaluated on their merits and advanced standing granted for studies undertaken elsewhere only when these are recognized as the equivalent of subjects offered in Carleton College. Every student admitted with advanced standing will be required to complete at least his last five courses in Carleton College.

Course Requirements

- *Bachelor of Science—Pass Course* (Offered in both day and evening divisions)

Length of course. Candidates for the Pass B.Sc. degree will take a total of twenty courses after Junior Matriculation, or fifteen after Senior Matriculation.

In the day division five courses will be taken in each of four years. No more than five courses may be taken in any academic year unless by permission of the Committee on Studies.

In the evening division students may take one or two courses in each winter session and one course in each summer session. No more than two courses may be taken in a winter session and no more than one in a summer session, unless by permission of the Committee on Studies.

Course selection. Courses will be selected from those listed under Details of Subjects, pp. 49 ff., as follows:

6. One of: English
Philosophy
Psychology
Accounting
Mathematics
History

Special Requirements

Regularly throughout the course, candidates will be required to prepare essays and memoranda on various special topics in the field of public administration.

Towards the end of the fifth year, each candidate must present a dissertation on some topic involving independent investigation. The topic should be chosen, in consultation with the head of the department, by the third year, and will be associated with the work of the three final years.

All candidates for the degree of B.A. with Honours in Public Administration will be required to show, by their final year, a reading knowledge of a modern language other than English.

JOURNALISM

● *Bachelor of Journalism* (Offered in day division only)

The course in Journalism is built around the conviction that the best college training for the career of journalist today consists of a good liberal arts education, combined with thorough training in the technical skills of interviewing, reporting, writing and editing. In the United States, with its much longer tradition in education for journalism, the tendency in four-year schools of journalism is to arrange courses so that students spend seventy-five to eighty per cent of their time in acquiring a good background, and only twenty to twenty-five per cent in technical courses. The result, says Frank Luther Mott, director of the University of Missouri School of Journalism, is to give such students "a mind trained and ripened by the liberal discipline—the social sciences, philosophy, mathematics, languages and so on."

While the education of a journalist must stress the art and science of expression (through the spoken as well as the written word), the importance of a writer having something to express cannot be neglected. The good newspaperman is noted for his ability to get information and to see the value of the facts he gets.

The course in Journalism at Carleton College emphasizes liberal scholarship and basic skills, in the belief that there are few practical applications of a specialized nature which cannot be subsequently acquired in a few weeks of actual work. While an array of "shop" courses in practical vocational training might appear to give more immediately useful crafts to the prospective journalist, it is assumed that no amount of "shop" training will carry a "cub" far if he lacks a broad background of liberal education and the intelligence to grasp and report the complex phenomena of modern society.

Admission Requirements

(a) *To the First Year* of the course leading to the Bachelor of Journalism degree:

Requirements are the same as those for admission to the first year of courses leading to the Bachelor of Arts degree (see p. 25).

(b) *To the Second Year* of the course leading to the Bachelor of Journalism degree:

Senior Matriculation—A candidate for admission to second year must have passed the examinations of first year, or of Ontario Grade XIII, or the equivalent examinations (see p. 26) of other recognized examining bodies in the following subjects:

1. English Composition and Literature

2. Latin or Mathematics (two of Algebra, Geometry, Trigonometry)
3. A modern language other than English
4. A science (Physics or Chemistry or Biology)
(In special circumstances a language may be offered instead of the science requirement on condition that the science subject must be taken in a subsequent year.)
5. History

(c) *To the Third and Fourth Years* of the course leading to the Bachelor of Journalism degree:

Undergraduates or graduates applying for admission to advanced standing with allowances on credits gained at their original college or university may be admitted to the third or to the fourth year, if their academic record is accepted as at least equivalent to the completion of second or third year Journalism in Carleton College. Normally, such applicants should offer standing in at least two of the following subjects in their previous work: Canadian History, Psychology, Economics, Political Science. Credit for courses previously taken will be arranged on application, subject to the stipulation that a minimum of a full year's work of at least the last five courses must be taken at Carleton College in order to qualify for the Bachelor of Journalism degree.

NOTE: Journalism students are urged to become reasonably proficient on the typewriter as soon as possible. All assignments in the courses Journalism 1, 2, 3, 4 and 5 (which are taken in the third and fourth years) will be done by typewriter.

Course Requirements

Length of course. Candidates for the Bachelor of Journalism degree must take a total of twenty courses in four years if admitted by Junior Matriculation, or fifteen courses in three years if admitted by Senior Matriculation.

Not more than five courses may be taken in any academic year, unless by permission of the Committee on Studies.

Course selection. The course leading to the degree of Bachelor of Journalism will consist of subjects selected from those listed under Details of Subjects, pp. 49 ff., as follows:

FIRST YEAR

1. English 1 or 11 (English 10 also may be required)
2. Latin 1 or Mathematics 1 (two of Algebra, Geometry, Trigonometry)
3. French 1 (or a course numbered 1 or higher in another language)

4. A science (Physics 1 or Chemistry or Chemistry 1 or Biology 1 or 11)
5. History 1

SECOND YEAR

1. English 2 or 4
2. French 2 (or a further year of work in another language)
3. One of: Economics 2, Political Science 2, Philosophy 2
4. History 3
5. Psychology 2

THIRD YEAR

1. Journalism 1
2. Journalism 2
3. History 13 (or History 3, if not taken in second year)*

*Normally both History 3 and History 13 will be required for a degree in Journalism. History 13 has for a prerequisite History 3 or its equivalent. In special circumstances, History 13 may be taken without the prerequisite, but the Department of History must be satisfied that the applicant has adequate background for the course.

4. One of: Economics 2 (if not taken in second year)
Political Science 2 (if not taken in second year)
An approved English course
5. One of: Economics 3, 5 or 6 (if Economics 2 has been taken previously)
Political Science 3 or 4 (if Political Science 2 has been taken previously)
Social Policy 1 or 2
An approved option

FOURTH YEAR

1. Journalism 3
2. Journalism 4
3. Journalism 5
4. History 13 (or, if taken previously, an approved course in English)
5. One of: Economics 3, 5 or 6 (if Economics 2 has been taken previously)
Political Science 3 or 4 (if Political Science 2 has been taken previously)
Social Policy 1 or 2
An approved option

Standing. General regulations regarding standing are stated on p. 23. In addition, candidates for the B.J. degree must obtain an average of at least 1.5 grade points in the course taken in Carleton College *and* grades of "C" or better in *each* of Journalism 3, 4 and 5.

COMMERCE

● *Bachelor of Commerce* (Offered in both day and evening divisions)

Admission Requirements

(a) *To the First Year* of the course leading to the Bachelor of Commerce degree:

Requirements are the same as those for admission to the first year of courses leading to the Bachelor of Arts degree (see p. 25).

(b) *To the Second Year* of the course leading to the Bachelor of Commerce degree:

Senior Matriculation—A candidate for admission to second year must have passed the examinations of first year, or of Ontario Grade XIII, or the equivalent examinations (see p. 26) of other recognized examining bodies in the following subjects:

1. English Composition and Literature
2. Mathematics (Algebra or Mathematics of Investment;
Geometry and Trigonometry)
(Accountancy Practice or Secretarial Practice may be offered in lieu of either Geometry or Trigonometry).
3. A modern language other than English
4. A science (Physics or Chemistry or Biology)
5. History

(c) *To the Third and Fourth Years* of the course leading to the Bachelor of Commerce degree:

Applications for admission to the third or fourth years will be evaluated on their merits and advanced standing granted for studies undertaken elsewhere only when these are recognized as the equivalent of subjects offered in Carleton College. Every student admitted with advanced standing will be required to complete at least his last five courses in Carleton College.

Course Requirements

Length of course. Candidates for the Bachelor of Commerce degree must take a total of twenty courses after Junior Matriculation, or fifteen after Senior Matriculation.

In the day division five courses will be taken in each of four years. No more than five courses may be taken in any academic year, unless by permission of the Committee on Studies.

In the evening division students may take one or two courses in each winter session and one course in each summer session. No more than two courses may be taken in a winter session and no more than one in a summer session, unless by permission of the Committee on Studies.

Course selection. Courses will be selected from those listed under Details of Subjects, pp. 49 ff., as follows:

FIRST YEAR

1. English 1 or 11 (English 10 also may be required)
2. Mathematics 1 (Algebra, Geometry and Trigonometry)
3. French 1 or a course numbered 1 or higher in another modern language
4. A science (Physics 1 or Chemistry 1 or Biology 1 or 11)
5. History 1 or 11

SECOND YEAR

1. English 2
2. French 2 or a further year of work in the modern language taken in first year
3. Mathematics 3a and 3b (two half courses)
4. Economics 2
5. Accounting 2
(Students entering second year with at least second class standing in Grade XIII Accountancy Practice may substitute an approved option for Accounting 2).

THIRD YEAR

1. Commerce 1 or Mathematics 2
2. Economics 3
3. Economics 8
4. Accounting 3
5. (a) Economics 13 (half-course)
(b) English 13 (half course)
or a further year of work in the modern language taken in second year
(In 1948-49, students who have not taken Mathematics 3a and 3b will take these two half courses rather than Economics 13.)

FOURTH YEAR

1. Economics 9 or 10
2. One of: History 1
Political Science 4
Philosophy 2
- 3.) Three of: Accounting 4
- 4.) Accounting 6
- 5.) Commerce 2
Commerce 3

Commerce	4
Commerce	5
Commerce	6
Economics	6
Economics	7
Economics	11
Journalism	2
Journalism	3
Psychology	2
Psychology	4
Mathematics	13

Standing. General regulations regarding standing are stated on p. 23. In addition, a candidate for a degree in Commerce who fails to secure an average of least 1.6 grade points in the first or second year or 1.8 in the third or fourth year will be required to withdraw from the Commerce course. Such students may apply for admission to the Pass B.A. course and if accepted must fulfil the requirements of that course in order to qualify for the Pass B.A. degree.

SCIENCE

Admission Requirements

(a) *To the First Year* of courses leading to the Bachelor of Science degree:

Requirements are the same as those for admission to the first year of courses leading to the Bachelor of Arts degree (see p. 25).

(b) *To the Second Year* of courses leading to the Bachelor of Science degree:

Senior Matriculation—A candidate for admission to second year must have passed the examinations of first year, or of Ontario Grade XIII, or the equivalent examinations (see p. 26) of other recognized examining bodies in the following subjects:

1. English Composition and Literature
2. Mathematics (Algebra, Geometry and Trigonometry)
3. A language other than English
- 4.) Two of: Physics, Chemistry, Biology
- 5.)

(c) *To the Third or subsequent years* of courses leading to the Bachelor of Science degree:

Applications for admission to the third or subsequent years will be evaluated on their merits and advanced standing granted for studies undertaken elsewhere only when these are recognized as the equivalent of subjects offered in Carleton College. Every student admitted with advanced standing will be required to complete at least his last five courses in Carleton College.

Course Requirements

● *Bachelor of Science—Pass Course* (Offered in both day and evening divisions)

Length of course. Candidates for the Pass B.Sc. degree will take a total of twenty courses after Junior Matriculation, or fifteen after Senior Matriculation.

In the day division five courses will be taken in each of four years. No more than five courses may be taken in any academic year unless by permission of the Committee on Studies.

In the evening division students may take one or two courses in each winter session and one course in each summer session. No more than two courses may be taken in a winter session and no more than one in a summer session, unless by permission of the Committee on Studies.

Course selection. Courses will be selected from those listed under Details of Subjects, pp. 49 ff., as follows:

FIRST YEAR

1. English 1 or 11 (English 10 also may be required)
2. Mathematics 1 (Algebra, Geometry and Trigonometry)
3. A language other than English (a course numbered 1 or higher)
(Students intending to proceed to an Honours B.Sc. are advised to consult the Registrar as to choice of language courses.)
- 4.) Two of: Physics 1
- 5.) Chemistry 1
Biology 1 or 11

SECOND YEAR

1. English 2
2. A further course in the language studied in first year
3. Mathematics 2
- 4.) Two other subjects chosen from among the Mathematics
- 5.) and Science subjects offered.

THIRD AND FOURTH YEARS

Third and fourth year courses may be selected from those for which the candidate has the prerequisites, five courses in each year, subject to the following requirement:

In order to qualify for graduation a candidate must have completed at least three courses in each of three subjects, counting from the commencement of the second year. The choice of these three subjects shall be made at the beginning of the third year.

Standing. General regulations regarding standing are stated on p. 23. In addition, candidates for the Pass B.Sc. degree must obtain an average of at least 1.5 grade points in the courses taken in Carleton College.

- *Bachelor of Science with Specific Honours* (Offered in day division only)

The Specific Honours Course is characterized by strict prescription of studies and high standards of performance, more especially in those departments in which major and minor subjects have been selected.

Additional admission requirements. Admission to Specific Honours will be granted only with the consent of the department in which the major subject is to be taken. Students who have attained at least second class standing in the first and second years of the Pass Course may be admitted to the third year of a Specific Honours Course. No students carrying a "condition" in the Pass Course will be admitted to a Specific Honours Course. Students who fail in the regular examinations of more

than one subject after admission to the second year of the Pass Course will not be admitted to a Specific Honours Course. For the purposes of this regulation, a supplemental examination does not erase a failure.

Length of course. Candidates for the degree of B.Sc. with Specific Honours will take a total of twenty-five courses in five years if admitted by Junior Matriculation, or twenty courses in four years if admitted by Senior Matriculation. Not more than five courses may be taken in any academic year, unless by permission of the Committee on Studies.

Course selection. A candidate for Specific Honours must, before the beginning of his third year, choose a major subject or field of study and a minor subject or field of study, and in these major and minor subjects or fields of study must take such courses as may be determined by the head of the department in which he is to pursue the work of his major. He must take at least four courses in the minor subject or field of study.

The whole course of a candidate for a Specific Honours degree must be in the beginning discussed with, and thereafter at every stage be approved by, the head of the department in which the candidate choose his major subject or field of study.

Specific Honours majors are now available in Applied Physics (see p. 43), in Physics and in Mathematics. Other majors will be made available in subsequent years.

Standing. General regulations regarding standing are stated on p. 23. Additional regulations regarding the standing of candidates for a Specific Honours degree are as follows.

A student's honours standing in any year's work will be determined by the Committee on Honours.

To receive credit towards a Specific Honours degree a candidate must obtain at least second class standing on the year's work.

No student may be awarded first class standing in any year's work if he has failed in any subject during the year. No student may be awarded second class standing in any year's work if he has failed in more than one subject during that year. For the purposes of these regulations a supplemental examination does not erase a failure.

No student may be awarded the First Class Honours degree if he has failed in more than one subject during his entire course. No student may be awarded the Second Class Honours degree if he has failed in more than two subjects during his entire course. For the purposes of these regulations a supplemental examination does not erase a failure.

Students who fail to obtain at least second class standing in any year must withdraw from the Specific Honours Course. Such students may apply for admission to the Pass Course.

- *Bachelor of Science with Honours in Applied Physics* (Offered in day division only)

The course leading to the degree of Bachelor of Science with Honours in Applied Physics is designed to serve students whose interest is in engineering research.

Special admission requirements. Admission to this course is open to students who have qualified in the two-year diploma course in Engineering (see p. 44) or the equivalent, with at least second class standing.

Length of course. Candidates for this degree will take a total of ten courses in two years following completion of the two-year course in Engineering (making a total of five years from Junior Matriculation or four years from Senior Matriculation).

Course selection. Courses will be selected in consultation with the head of the Physics department, five in each of the two years.

Standing. The regulations regarding standing in courses leading to the degree of Bachelor of Science with Specific Honours apply. (See p. 42).

ENGINEERING

● *Diploma in Engineering* (Offered in day division only)

Studies offered in Applied Science and Engineering cover the first two years of a four-year Engineering course and require Senior Matriculation or the equivalent for admission. The first year is common to all branches of engineering; the second year is designed for students intending to specialize in civil, mechanical or electrical engineering.

Students completing the Engineering course at Carleton College may, if recommended, be admitted to the third year of Engineering courses at McGill University, Queen's University or The University of Toronto, where they may qualify in two additional years for a degree in Engineering.

Alternatively, students completing the Engineering course at Carleton College may transfer to the course leading to the degree of Bachelor of Science with Honours in Applied Physics, which involves two additional years of study in Carleton College. (See p. 43).

Admission Requirements

(a) *To the First Year* of the course leading to the Diploma in Engineering:

Senior Matriculation—A candidate for admission to the first year of the course leading to the Diploma in Engineering must have passed the examinations of the first year of the Bachelor of Science course in Carleton College (see p. 25), or of Ontario Grade XIII, or the equivalent examinations (see p. 26) of other recognized examining bodies in the following subjects:

1. English Composition and Literature
2. Mathematics (Algebra, Geometry, including Analytic Geometry, and Trigonometry) with not less than second class standing
3. One of: Latin, Greek, French, German, Spanish, Italian, History, Biology (Botany and Zoology)
(Students intending to proceed to The University of Toronto in the Faculty of Applied Science and Engineering should choose a language.)
4. Physics
5. Chemistry

(b) *To the Second Year* of the course leading to the Diploma in Engineering:

Students who have successfully completed the work of first year Engineering in Carleton College, or equivalent work elsewhere, may apply for admission to the second year.

Course Requirements

Length of course. Candidates for the Diploma in Engineering will take a course covering two years of study after Senior Matriculation or after the first year of the B.Sc. course.

Course selection. Courses will be selected from those listed under Details of Subjects, pp. 49 ff., as follows:

FIRST YEAR

Common to all branches of Engineering

Subject	Lecture hours per week		Laboratory hours per week		See page
	First Term	Second Term	First Term	Second Term	
English 12.....	2	2	0	0	62
Mathematics 4a & 4b.....	3	3	0	0	73
Mathematics 5.....	3	3	0	0	74
Physics 2a & 2b.....	3	3	2	2	77
Chemistry 3.....	2	2	1	1	52
Mechanics.....	2	2	2	2	57
Engineering Problems I.....	0	0	3	3	58
Mechanical Drawing I.....	0	0	6	6	59
Surveying.....	1	1	3	0	58
Engineering & Society.....	0	1	0	0	59
Surveying Field Work.....	(Four weeks in May or September)				58
	16	17	17	14	

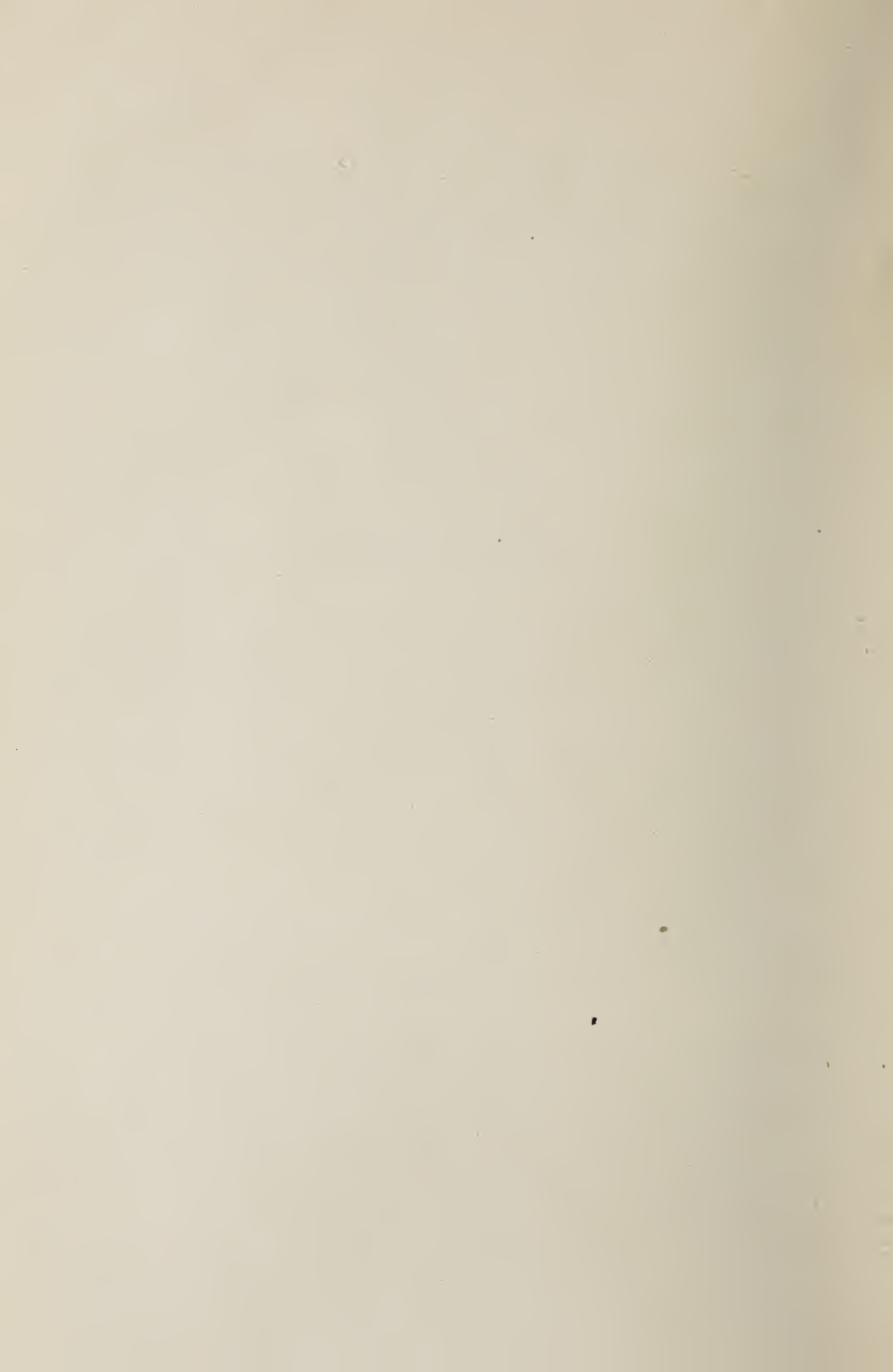
SECOND YEAR
Civil, Mechanical and Electrical Engineering

Subject	Lecture hours per week		Laboratory hours per week		See page
	First Term	Second Term	First Term	Second Term	
Mathematics 6 & 7.....	3	3	0	0	74
Materials of Engineering.....	1	2	0	0	58
Descriptive Geometry.....	0	0	2	2	58
Mechanical Drawing II.....	0	0	3	3	59
Applied Mechanics.....	2	2	2	2	57
Mechanics of Machines.....	2	0	2	0	58
Physics 3a & 3b.....	2	2	3	3	78
Geology 2.....	2	2	2	2	65
Surveying & Mapping.....	1	1	3	3	59
Engineering Problems II.....	0	0	1	2	58
Chemistry 5.....	2	2	0	0	53
Heat Engines, Elementary...	0	1	0	0	58
Public Speaking.....	0	0	0	1	59
Economics 4.....	1	1	0	0	55
	16	16	18	18	

NOTE: Students proceeding to third year Engineering at another university will be required to attend the appropriate summer school prior to entry to the third year.

Standing. The standing in each course is graded as I (first class standing, 80-100%), II (second class standing, 65-79%), III (third class standing, 50-64%) or "F" (failure, below 50%). To receive credit toward the Diploma in Engineering a candidate must obtain at least third class standing in the work of each course.

Details of Subjects



ACCOUNTING

Sessional Lecturers . . . H. N. Corbett, B.Com.
R. G. McCorkle, B.Acc., C.A.
Others to be appointed

Note: Accounting 2, 3 and 4 are recognized by the Society of Industrial and Cost Accountants of Ontario as credits towards the certificate of Registered Industrial and Cost Accountant (R.I.A.). For details, consult the Registrar.

ACCOUNTING 2. *Elementary Accounting*

The theory and practice of accounts. The principles of debit and credit; books of original record; documents employed, sales, purchases, consignments; returns inward and returns outward, correction of errors. Subsidiary ledgers and controlling accounts to represent them in the general ledger; special forms of original record required to facilitate such control; notes and drafts, discounting and renewal of notes; single entry; revenue and capital expenditure; depreciation of fixed assets; the general ledger and trial balance; adjusting and closing entries; trading and profit and loss statements and balance sheet; single proprietorship; elements of corporation finance.

TEXT: Walker, *Accounting Principles and Bookkeeping Procedure*.

Day Division: Annually (lectures three hours a week).

Evening Division: Annually (lectures two hours a week).

ACCOUNTING 3. *Intermediate Accounting* (Formerly Accounting 100).

A study of the theory and practice of accounts, with specific attention to their application to the corporate form of business organization. The latter portion of the course will be devoted to an examination of special accounting problems.

TEXTS: Smails and Walker, *Accounting Principles and Practice*, fifth edition (Ryerson).

Paton, *Essentials of Accounting* (Macmillan).

Finney, *Principles of Accounting, Vols. I and II* (Prentice-Hall).

PREREQUISITES: Mathematics 1 and Accounting 2.

Day Division: Annually (lectures three hours a week).

Evening Division: Annually (lectures two hours a week).

ACCOUNTING 4. *Advanced Accounting* (Formerly Accounting 101)

The early part of the course is designed to provide for advanced work in the field of accounting theory followed by the examination of specific problems in, e.g., capital and revenue receipts and expenditures; valuation and depreciation of fixed assets; inventory control and valuation, costing procedures; consolidations; income and excess profit taxes; the construction, analysis and interpretation of financial statements.

TEXTS: Paton and Littleton, *An Introduction to Corporate Accounting Standards* (American Accounting Association).

Paton, *Essentials of Accounting, Vols. I and II*.

Smails and Walker, *Accounting Principles and Practice* (Ryerson).

PREREQUISITES: Accounting 3 and Economics 2.

Day Division: Annually (lectures three hours a week).

Evening Division: Annually (lectures two hours a week).

ACCOUNTING 5. *Government Accounting and Finance* (Formerly Accounting 102)

A study of the financial administration and organization of the Dominion Government, including the preparation, legalization and execution of the budget; the authorization and collection of revenues; government borrowing and public debt; parliamentary

appropriations; the disbursement of public moneys; the audit of the public accounts; the financial functions of Parliament; the Committees of Supply and Ways and Means; the Governor in Council; the Treasury Board; the Receiver General and Minister of Finance; the Department of Finance and the Comptroller of the Treasury; the Bank of Canada; the Auditor General; and the Public Accounts Committee. The course will include some reference to the financial administrative practices of other countries.

PREREQUISITE: Accounting 2.

Not offered 1948-49.

ACCOUNTING 6. *Cost Accounting and Auditing*

Systems of control over elements of cost; study of systems covering materials, direct labour and overhead and their distribution; standard costs, budgetary control. Purposes, principles and methods of types of audit; internal audit; responsibilities and liabilities of auditors; analysis of accounts; audit reports.

TEXT: To be announced.

PREREQUISITES: Accounting 2 and 3.

Day Division: Not offered 1948-49.

Evening Division: Annually (lectures two hours a week).

BIOLOGY

Assistant Professor . . . H. H. J. Nesbitt, M.A., Ph.D.

Sessional Lecturers . . . A. Deakin, B.S.A., M.S., Ph.D.

L. R. Merkley, M.A., B.Paed.

BIOLOGY 1. *General Biology*

A comprehensive study of plants and animals designed to illustrate the principles governing life and the development of organisms. The laboratory period is devoted to a study of representative forms. (Biology 1 and 11 are alternative first year courses.)

TEXT: Mavor, *General Biology* (Macmillan).

REFERENCE TEXTS: Hegner, *General Biology* (Macmillan).

Brown, *The Plant Kingdom*.

Transeau, Sampson and Tiffany, *Textbook of Botany*.

Day Division: Annually (lectures two hours a week, laboratory three hours a week).

Evening Division: Evening students take Biology 11.

BIOLOGY 2. *Comparative Vertebrate Anatomy*

A course dealing with the comparative anatomy and development of the various systems in vertebrate animals. Special attention is paid to the study of mammalian anatomy.

TEXT: Grove and Newel, *Animal Biology* (Tutorial Press).

REFERENCE TEXTS: Neal and Rand, *Comparative Anatomy* (Blakiston).

Hyman, *Comparative Vertebrate Anatomy* (Chicago).

deBeer, *Vertebrate Zoology* (Sidgwick and Jackson).

Parker and Haswell, *Textbook of Zoology, Vol. II* (Macmillan).

PREREQUISITE: Biology 1 or 11 (except by permission).

Day Division: 1948-49 (lectures two hours a week, laboratory three hours a week).

Evening Division: Not offered 1948-49.

BIOLOGY 3. *General Invertebrate Zoology*

A survey of representative examples of the major invertebrate phyla with reference to anatomy, taxonomy and life histories.

TEXT: Hegner, *Invertebrate Zoology* (Macmillan).

REFERENCE TEXTS: Borradaile, Estham, Pots and Saunders, *The Invertebrata* (Cambridge).

Parker and Haswell, *Textbook of Zoology, Vol. I* (Macmillan).

PREREQUISITE: Biology 1 or 11.

Day Division: 1948-49 (lectures two hours a week, laboratory three hours a week).

Evening Division: Not offered 1948-49.

BIOLOGY 4. *Animal Physiology*

A study of the fundamental principles of animal physiology.

REFERENCE TEXT:: Gerrard, *The Unresting Cells*.

Taylor, *The Human Body*.

Wright, *Applied Physiology* (Oxford).

PREREQUISITE: Biology 2 (may be taken concurrently).

Day Division: 1948-49 (lectures two hours a week, laboratory three hours a week).

Evening Division: Not offered 1948-49.

BIOLOGY 5. *Genetics*

A lecture course designed to illustrate the principles of genetics.

TEXT: Sinnott and Dunn, *Principles of Genetics* (McGraw-Hill).

REFERENCE TEXT: Altenburg, *Genetics* (Holt).

PREREQUISITE: Biology 1 or 11.

Day Division: Not offered 1948-49.

Evening Division: 1948-49 (lectures two hours a week).

BIOLOGY 6. *Introduction to the Anthrropods*

A more advanced course on the morphology and classification of representative forms from the phylum Anthropoda.

REFERENCE TEXTS: Smith, Woods, etc., *Cambridge Natural History, Vol. IV*, Crustacea and Arachnids (Macmillan).

Parker and Haswell, *Textbook of Zoology, Vol. I* (Macmillan).

PREREQUISITE: Biology 3 (may be taken concurrently).

Not offered 1948-49.

BIOLOGY 7. *Entomology*

A course on the morphology, physiology and classification of representatives of the more important orders and families of insects.

TEXTS: Comstock, *Introduction to Entomology* (Comstock).

Snodgrass, *Principles of Insect-Morphology* (McGraw-Hill).

REFERENCE TEXT: Imms, *Entomology* (Methuen).

Not offered 1948-49.

BIOLOGY 8. *General Botany and Plant Morphology*

The fundamental facts and principles of plant life. A careful study of form, structure and reproduction of representatives of the principal groups.

TEXT: Brown, *The Plant Kingdom* (Ginn).

PREREQUISITE: Biology 1 or 11.

Not offered 1948-49.

BIOLOGY 11. General Biology

The course of study prescribed by the Ontario Department of Education for Grade XIII in the secondary schools of Ontario. (Biology 1 and 11 are alternative first year courses.)

TEXT: Moon, Man and Otto, *Modern Biology*.

Day Division: Day students take Biology 1.

Evening Division: Annually (lectures and laboratory two and one-half hours a week).

CHEMISTRY

Assistant Professor . . . J. M. Morton, M.Sc., Ph.D.

Lecturers J. M. Holmes, M.A., Ph.D.

Henry Montgomery, M.A.

Sessional Lecturers . . . G. A. Adams, B.A., M.Sc., Ph.D.

V. E. Bullock, M.A.

C. Y. Hopkins, M.A., Ph.D.

Demonstrator W. H. Ellis, B.A.

CHEMISTRY 1. General Chemistry

The chemistry of the more important non-metals and metals and their compounds. The fundamental laws and principles of chemistry are emphasized.

TEXT: To be announced.

Day Division: Annually (lectures three hours a week, laboratory three hours a week).

Evening Division: Annually (lectures and laboratory two and one-half hours a week).

CHEMISTRY 2. Organic Chemistry

An introductory course in organic chemistry dealing with the main classes of organic compounds. Both theoretical and practical aspects are considered. The laboratory work provides practice in the basic processes of synthesis and purification of organic compounds.

TEXTS: Conant and Blatt, *The Chemistry of Organic Compounds* (Macmillan, 1947).

Nicholls, *Practical Organic Chemistry* (Pitman, 1947).

PREREQUISITE: Chemistry 1. (It is recommended that Chemistry 6 be taken previously or concurrently.)

Day Division: Annually (lectures three hours a week, laboratory three hours a week).

Evening Division: Annually (lectures two hours a week, laboratory two to three hours a week).

CHEMISTRY 3. Elementary Physical Chemistry

An introductory course in physical chemistry for students in first year Engineering. The course covers the states of matter, the laws of solutions, hydrogen ion concentration, thermochemistry and atomic structure. Problems to illustrate the laws of chemistry and to give practice in dealing with conversion from the metric to the usual units of chemical engineering practice will be assigned.

TEXT: Maas and Steacie, *Introduction to Physical Chemistry* (Wiley).

PREREQUISITE: Chemistry 1.

Day Division: Annually, for first year Engineering students only (lectures two hours a week, one one-hour problem period a week).

Evening Division: Not offered.

CHEMISTRY 4. *Organic Qualitative Analysis*

The principles of analysis and identification of organic compounds. The course is mainly devoted to laboratory work and includes qualitative determinations of the elements and groups, together with some of the simpler quantitative methods; preparation of derivatives; physical properties.

TEXT: To be announced.

PREREQUISITE: Chemistry 2.

Day Division: 1948-49 and alternate years (lectures two hours a week, laboratory three hours a week).

Evening Division: 1949-50 and alternate years (lectures and laboratory three hours a week).

CHEMISTRY 5. *Chemistry of Engineering Materials*

A course for second year Engineering students. It deals with the materials of engineering, water treatment, corrosion, organic compounds, fuels, rubber, plastics and explosives.

REFERENCE TEXT: Leighon, *Chemistry of Engineering Materials*.

PREREQUISITE: Chemistry 3.

Day Division: Annually, for second year Engineering students only (lectures two hours a week).

Evening Division: Not offered.

CHEMISTRY 6. *Qualitative Analysis*

Chemical equilibrium; oxidation and reduction; theory of ionization; solubility product; ionization constant; complex ions and compounds; colloids; etc. The application of the principles of chemical equilibrium to the systematic separation of the common cations and anions is practiced in the laboratory. (This course is recommended for second year students.)

TEXT: Belcher and Williams, *A Course in Qualitative Analysis* (Houghton Mifflin).

PREREQUISITE: Chemistry 1.

Day Division: Annually (lectures three hours a week, laboratory three hours a week).

Evening Division: 1948-49 and alternate years (lectures two hours a week, laboratory two to three hours a week).

CHEMISTRY 7. *Quantitative Analysis*

A course in quantitative analysis covering the fundamental methods of volumetric and gravimetric analysis.

TEXT: Hamilton and Simpson, *Talbot's Quantitative Analysis* (Macmillan).

PREREQUISITE: Chemistry 6.

Day Division: Annually (lectures two hours a week, laboratory six hours a week).

Evening Division: Not offered 1948-49.

CHEMISTRY 8. *Physical Chemistry*

The gaseous and liquid states; solids; solutions; equilibrium in homogeneous and heterogeneous systems; kinetics of reactions; periodic law and atomic structure; colloids and surface phenomena; electrochemistry; thermochemistry and thermodynamics.

TEXTS: Getman and Daniels, *Outlines of Physical Chemistry*, 7th edition (Wiley).

Daniels, Mathews and Williams, *Experimental Physical Chemistry* (McGraw Hill, 1941).

PREREQUISITES: Chemistry 6 and Mathematics 2.

Day Division: 1948-49 and alternate years (lectures three hours a week, laboratory three hours a week).

Evening Division: 1949-50 and alternate years.

CHEMISTRY 9. *Biochemistry*

The chemistry of plant and animal substances and the processes of metabolism and nutrition.

TEXT: To be announced.

PREREQUISITE: Chemistry 2.

Day Division: 1949-50 and alternate years.

Evening Division: 1948-49 and alternate years (lectures two hours a week, laboratory two to three hours a week).

COMMERCE

Assistant Professor . . . F. J. Turner, B.Com., M.A.

Lecturer Agnes Y. Fleming, B.Com., B.Ed.

Sessional Lecturers . . . M. E. Corlett, B.A.

J. T. Montague, M.A.

COMMERCE 1. *Commercial Law*

The law of contract and agency, sale of goods, negotiable instruments, partnerships and companies, bankruptcy and insolvency, bills of sale and chattel mortgages.

Day Division: Annually (lectures three hours a week).

Evening Division: Annually (lectures two hours a week).

COMMERCE 2. *Business Finance*

A study of the capital of business; methods and costs of raising capital; shares and bonds; the capital market; operating problems, dividends, reserves, combinations; bankruptcy.

PREREQUISITE: Economics 2.

Day Division: 1948-49 (lectures three hours a week).

Evening Division: Not offered 1948-49.

COMMERCE 3. *Management Techniques*

The problems of the business firm and techniques used in solution in the fields of personnel, manufacturing, buying and selling.

PREREQUISITE: Economics 2.

Day Division: 1948-49 (lectures three hours a week).

Evening Division: Not offered 1948-49.

COMMERCE 4. *Labour Problems*

An outline of the problems related to wages, working conditions, unemployment, promotion; attempts of workers to meet these problems; attitudes and policies of employers; the place of the state.

PREREQUISITE: Economics 2.

Day Division: 1948-49 (lectures three hours a week).

Evening Division: Not offered 1948-49.

COMMERCE 5. *Marketing*

The essential organizations and operations of marketing; the performance of the various marketing agencies at retail and wholesale levels; advertising; market research and analysis. (Students taking this course will be encouraged to take part-time

employment in local marketing organizations and will be assisted in arranging such employment.)

PREREQUISITE: Economics 2.

Day Division: 1948-49 (lectures three hours a week).

Evening Division: Not offered 1948-49.

COMMERCE 6. *Business Problems*

A study of the operations of business to discover how it has met problems of capitalization, production, control, personnel and marketing. From this study detailed blueprints for the initiation of a small business will be drawn up.

PREREQUISITE: Open to students in the fourth year of the B.Com. course.

Day Division: 1948-49 (lectures three hours a week).

Evening Division: Not offered 1948-49.

ECONOMICS

Assistant Professor . . . H. S. Gordon, M.A.

Sessional Lecturers . . . W. E. Duffett, B.Com., M.Sc. (Econ.)

Claude Isbister, A.M., Ph.D.

R. W. Lawson, M.A.

Frank Shefrin, B.S.A., M.S.

G. S. Watts, M.A.

David Ivor, M.A., Ph.D.

Samuel Trachtenberg, M.A.

H. H. Coulson, M.A.

ECONOMICS 2. *Principles of Economics*

Markets and equilibrium price. Wants and demand schedules; production, costs and supply schedules. Competition and monopoly. The agents of production; their controllable and non-controllable characteristics, and their market prices. Interdependence of prices and role of the price system. Income and its distribution; money and changes in its purchasing power. Elements of business cycles.

Day Division: Annually (lectures two hours a week, group discussion one hour a week).

Evening Division: Annually (lectures two hours a week). Also Summer 1948 (lectures five hours a week).

ECONOMICS 3. *Canadian Economic History and Geography*

The growth of civilization on the North American continent. The influences of environment and the impact of ideas and institutions from other areas on North American development.

Day Division: Annually (lectures two hours a week, group discussion one hour a week).

Evening Division: Annually (lectures two hours a week).

ECONOMICS 4. *Economics for Engineers*

The object of this course is to give Engineering students an introduction to some of the economic problems existing in the world of today, with particular reference to Canada.

Day Division: Annually, for second year Engineering students only (lectures one hour a week).

Evening Division: Not offered.

ECONOMICS 5. *Natural Resources of Canada* (Formerly Economics 100)

Forest, mineral and water; character and distribution; development, utilization and conservation; problems and policies. Special attention will be given to the problems of development in Canada's Northland.

PREREQUISITE: Economics 2.

Day Division: Not offered 1948-49.

Evening Division: 1948-49 and alternate years (lectures two hours a week).

ECONOMICS 6. *Agricultural Organization and Policy* (Formerly Economics 101)

The economic organization of Canadian agriculture; the position of agriculture in the Canadian economy and the impacts on it of government policy and international trade.

PREREQUISITE: Economics 2. Recommended: Economics 5.

Day Division: Not offered 1948-49.

Evening Division: 1948-49 and alternate years (lectures two hours a week).

ECONOMICS 7. *International Trade* (Formerly Economics 102)

It is the aim of this course to provide the student with a wide working basis. The first half of the course deals with the mechanics of international trade, the foreign exchange market, bills of exchange, the balance of payments, tariffs, foreign exchange control, etc. Attention is then turned to the theory of international trade, from the more primitive concepts down to the recent analytical structures. Throughout the balance of the course some attention will be given to special studies of topical interest. But the primary aim is to put to practical use the knowledge of the mechanics and theoretical tools of international trade gained earlier in the course, through an interpretation of several phases of Canadian economic history relating to the international field.

PREREQUISITES: Economics 2 and 3.

Day Division: Not offered 1948-49.

Evening Division: 1948-49 (lectures two hours a week).

ECONOMICS 8. *Money and Banking* (Formerly Economics 103)

The theory and practice of banking and finance, with specific reference to the purposes and functions of the country's important financial institutions. Attention will be called to the role of money and finance in the production and distribution of the national income and in the problem of full employment. Relevant problems of international trade and foreign exchange standards will also be introduced.

PREREQUISITE: Economics 2.

Day Division: Annually (lectures two hours a week, group discussion one hour a week).

Evening Division: 1949-50 and alternate years (lectures two hours a week).

Also Summer 1948 (lectures five hours a week).

ECONOMICS 9. *Advanced Economics Theory* (Formerly Economics 104)

A critical examination of modern aggregate economic theory and its application to modern problems, particularly the business cycle and employment.

PREREQUISITES: Economics 2 and 8.

Day Division: Annually (lectures two hours a week, group discussion one hour a week).

Evening Division: Not offered 1948-49.

ECONOMICS 10. *Economic History* (Formerly Economics 105)

This course is concerned with tracing the economic development from feudalism to finance capitalism, particularly in the United Kingdom and the United States.

PREREQUISITE: Economics 3.

Day Division: Not offered 1948-49.

Evening Division: 1948-49 (lectures two hours a week).

ACCOUNTING

Sessional Lecturers . . . H. N. Corbett, B.Com.
R. G. McCorkle, B.Acc., C.A.
Others to be appointed

Note: Accounting 2, 3 and 4 are recognized by the Society of Industrial and Cost Accountants of Ontario as credits towards the certificate of Registered Industrial and Cost Accountant (R.I.A.). For details, consult the Registrar.

ACCOUNTING 2. *Elementary Accounting*

The theory and practice of accounts. The principles of debit and credit; books of original record; documents employed, sales, purchases, consignments; returns inward and returns outward, correction of errors. Subsidiary ledgers and controlling accounts to represent them in the general ledger; special forms of original record required to facilitate such control; notes and drafts, discounting and renewal of notes; single entry; revenue and capital expenditure; depreciation of fixed assets; the general ledger and trial balance; adjusting and closing entries; trading and profit and loss statements and balance sheet; single proprietorship; elements of corporation finance.

TEXT: Walker, *Accounting Principles and Bookkeeping Procedure*.

Day Division: Annually (lectures three hours a week).

Evening Division: Annually (lectures two hours a week).

ACCOUNTING 3. *Intermediate Accounting* (Formerly Accounting 100).

A study of the theory and practice of accounts, with specific attention to their application to the corporate form of business organization. The latter portion of the course will be devoted to an examination of special accounting problems.

TEXTS: Smails and Walker, *Accounting Principles and Practice*, fifth edition (Ryerson).

Paton, *Essentials of Accounting* (Macmillan).

Finney, *Principles of Accounting, Vols. I and II* (Prentice-Hall).

PREREQUISITES: Mathematics 1 and Accounting 2.

Day Division: Annually (lectures three hours a week).

Evening Division: Annually (lectures two hours a week).

ACCOUNTING 4. *Advanced Accounting* (Formerly Accounting 101)

The early part of the course is designed to provide for advanced work in the field of accounting theory followed by the examination of specific problems in, e.g., capital and revenue receipts and expenditures; valuation and depreciation of fixed assets; inventory control and valuation, costing procedures; consolidations; income and excess profit taxes; the construction, analysis and interpretation of financial statements.

TEXTS: Paton and Littleton, *An Introduction to Corporate Accounting Standards* (American Accounting Association).

Paton, *Essentials of Accounting, Vols. I and II*.

Smails and Walker, *Accounting Principles and Practice* (Ryerson).

PREREQUISITES: Accounting 3 and Economics 2.

Day Division: Annually (lectures three hours a week).

Evening Division: Annually (lectures two hours a week).

ACCOUNTING 5. *Government Accounting and Finance* (Formerly Accounting 102)

A study of the financial administration and organization of the Dominion Government, including the preparation, legalization and execution of the budget; the authorization and collection of revenues; government borrowing and public debt; parliamentary

appropriations; the disbursement of public moneys; the audit of the public accounts; the financial functions of Parliament; the Committees of Supply and Ways and Means; the Governor in Council; the Treasury Board; the Receiver General and Minister of Finance; the Department of Finance and the Comptroller of the Treasury; the Bank of Canada; the Auditor General; and the Public Accounts Committee. The course will include some reference to the financial administrative practices of other countries.

PREREQUISITE: Accounting 2.

Not offered 1948-49.

ACCOUNTING 6. *Cost Accounting and Auditing*

Systems of control over elements of cost; study of systems covering materials, direct labour and overhead and their distribution; standard costs, budgetary control. Purposes, principles and methods of types of audit; internal audit; responsibilities and liabilities of auditors; analysis of accounts; audit reports.

TEXT: To be announced.

PREREQUISITES: Accounting 2 and 3.

Day Division: Not offered 1948-49.

Evening Division: Annually (lectures two hours a week).

BIOLOGY

Assistant Professor . . . H. H. J. Nesbitt, M.A., Ph.D.

Sessional Lecturers . . . A. Deakin, B.S.A., M.S., Ph.D.
L. R. Merkley, M.A., B.Paed.

BIOLOGY 1. *General Biology*

A comprehensive study of plants and animals designed to illustrate the principles governing life and the development of organisms. The laboratory period is devoted to a study of representative forms. (Biology 1 and 11 are alternative first year courses.)

TEXT: Mavor, *General Biology* (Macmillan).

REFERENCE TEXTS: Hegner, *General Biology* (Macmillan).

Brown, *The Plant Kingdom*.

Transeau, Sampson and Tiffany, *Textbook of Botany*.

Day Division: Annually (lectures two hours a week, laboratory three hours a week).

Evening Division: Evening students take Biology 11.

BIOLOGY 2. *Comparative Vertebrate Anatomy*

A course dealing with the comparative anatomy and development of the various systems in vertebrate animals. Special attention is paid to the study of mammalian anatomy.

TEXT: Grove and Newel, *Animal Biology* (Tutorial Press).

REFERENCE TEXTS: Neal and Rand, *Comparative Anatomy* (Blakiston).

Hyman, *Comparative Vertebrate Anatomy* (Chicago).

deBeer, *Vertebrate Zoology* (Sidgwick and Jackson).

Parker and Haswell, *Textbook of Zoology, Vol. II*
(Macmillan).

PREREQUISITE: Biology 1 or 11 (except by permission).

Day Division: 1948-49 (lectures two hours a week, laboratory three hours a week).

Evening Division: Not offered 1948-49.

BIOLOGY 3. *General Invertebrate Zoology*

A survey of representative examples of the major invertebrate phyla with reference to anatomy, taxonomy and life histories.

TEXT: Hegner, *Invertebrate Zoology* (Macmillan).

REFERENCE TEXTS: Borradaile, Estham, Pots and Saunders, *The Invertebrata* (Cambridge).

Parker and Haswell, *Textbook of Zoology, Vol. I* (Macmillan).

PREREQUISITE: Biology 1 or 11.

Day Division: 1948-49 (lectures two hours a week, laboratory three hours a week).

Evening Division: Not offered 1948-49.

BIOLOGY 4. *Animal Physiology*

A study of the fundamental principles of animal physiology.

REFERENCE TEXT:: Gerrard, *The Unresting Cells*.

Taylor, *The Human Body*.

Wright, *Applied Physiology* (Oxford).

PREREQUISITE: Biology 2 (may be taken concurrently).

Day Division: 1948-49 (lectures two hours a week, laboratory three hours a week).

Evening Division: Not offered 1948-49.

BIOLOGY 5. *Genetics*

A lecture course designed to illustrate the principles of genetics.

TEXT: Sinnott and Dunn, *Principles of Genetics* (McGraw-Hill).

REFERENCE TEXT: Altenburg, *Genetics* (Holt).

PREREQUISITE: Biology 1 or 11.

Day Division: Not offered 1948-49.

Evening Division: 1948-49 (lectures two hours a week).

BIOLOGY 6. *Introduction to the Anthrropods*

A more advanced course on the morphology and classification of representative forms from the phylum Anthropoda.

REFERENCE TEXTS: Smith, Woods, etc., *Cambridge Natural History, Vol. IV*, Crustacea and Arachnids (Macmillan).

Parker and Haswell, *Textbook of Zoology, Vol. I* (Macmillan).

PREREQUISITE: Biology 3 (may be taken concurrently).

Not offered 1948-49.

BIOLOGY 7. *Entomology*

A course on the morphology, physiology and classification of representatives of the more important orders and families of insects.

TEXTS: Comstock, *Introduction to Entomology* (Comstock).

Snodgrass, *Principles of Insect-Morphology* (McGraw-Hill).

REFERENCE TEXT: Imms, *Entomology* (Methuen).

Not offered 1948-49.

BIOLOGY 8. *General Botany and Plant Morphology*

The fundamental facts and principles of plant life. A careful study of form, structure and reproduction of representatives of the principal groups.

TEXT: Brown, *The Plant Kingdom* (Ginn).

PREREQUISITE: Biology 1 or 11.

Not offered 1948-49.

BIOLOGY 11. General Biology

The course of study prescribed by the Ontario Department of Education for Grade XIII in the secondary schools of Ontario. (Biology 1 and 11 are alternative first year courses.)

TEXT: Moon, Man and Otto, *Modern Biology*.

Day Division: Day students take Biology 1.

Evening Division: Annually (lectures and laboratory two and one-half hours a week).

CHEMISTRY

Assistant Professor . . . J. M. Morton, M.Sc., Ph.D.

Lecturers J. M. Holmes, M.A., Ph.D.

Henry Montgomery, M.A.

Sessional Lecturers . . . G. A. Adams, B.A., M.Sc., Ph.D.

V. E. Bullock, M.A.

C. Y. Hopkins, M.A., Ph.D.

Demonstrator W. H. Ellis, B.A.

CHEMISTRY 1. General Chemistry

The chemistry of the more important non-metals and metals and their compounds. The fundamental laws and principles of chemistry are emphasized.

TEXT: To be announced.

Day Division: Annually (lectures three hours a week, laboratory three hours a week).

Evening Division: Annually (lectures and laboratory two and one-half hours a week).

CHEMISTRY 2. Organic Chemistry

An introductory course in organic chemistry dealing with the main classes of organic compounds. Both theoretical and practical aspects are considered. The laboratory work provides practice in the basic processes of synthesis and purification of organic compounds.

TEXTS: Conant and Blatt, *The Chemistry of Organic Compounds* (Macmillan, 1947).

Nicholls, *Practical Organic Chemistry* (Pitman, 1947).

PREREQUISITE: Chemistry 1. (It is recommended that Chemistry 6 be taken previously or concurrently.)

Day Division: Annually (lectures three hours a week, laboratory three hours a week).

Evening Division: Annually (lectures two hours a week, laboratory two to three hours a week).

CHEMISTRY 3. Elementary Physical Chemistry

An introductory course in physical chemistry for students in first year Engineering. The course covers the states of matter, the laws of solutions, hydrogen ion concentration, thermochemistry and atomic structure. Problems to illustrate the laws of chemistry and to give practice in dealing with conversion from the metric to the usual units of chemical engineering practice will be assigned.

TEXT: Maas and Steacie, *Introduction to Physical Chemistry* (Wiley).

PREREQUISITE: Chemistry 1.

Day Division: Annually, for first year Engineering students only (lectures two hours a week, one one-hour problem period a week).

Evening Division: Not offered.

CHEMISTRY 4. *Organic Qualitative Analysis*

The principles of analysis and identification of organic compounds. The course is mainly devoted to laboratory work and includes qualitative determinations of the elements and groups, together with some of the simpler quantitative methods; preparation of derivatives; physical properties.

TEXT: To be announced.

PREREQUISITE: Chemistry 2.

Day Division: 1948-49 and alternate years (lectures two hours a week, laboratory three hours a week).

Evening Division: 1949-50 and alternate years (lectures and laboratory three hours a week).

CHEMISTRY 5. *Chemistry of Engineering Materials*

A course for second year Engineering students. It deals with the materials of engineering, water treatment, corrosion, organic compounds, fuels, rubber, plastics and explosives.

REFERENCE TEXT: Leighton, *Chemistry of Engineering Materials*.

PREREQUISITE: Chemistry 3.

Day Division: Annually, for second year Engineering students only (lectures two hours a week).

Evening Division: Not offered.

CHEMISTRY 6. *Qualitative Analysis*

Chemical equilibrium; oxidation and reduction; theory of ionization; solubility product; ionization constant; complex ions and compounds; colloids; etc. The application of the principles of chemical equilibrium to the systematic separation of the common cations and anions is practiced in the laboratory. (This course is recommended for second year students.)

TEXT: Belcher and Williams, *A Course in Qualitative Analysis* (Houghton Mifflin).

PREREQUISITE: Chemistry 1.

Day Division: Annually (lectures three hours a week, laboratory three hours a week).

Evening Division: 1948-49 and alternate years (lectures two hours a week, laboratory two to three hours a week).

CHEMISTRY 7. *Quantitative Analysis*

A course in quantitative analysis covering the fundamental methods of volumetric and gravimetric analysis.

TEXT: Hamilton and Simpson, *Talbot's Quantitative Analysis* (Macmillan).

PREREQUISITE: Chemistry 6.

Day Division: Annually (lectures two hours a week, laboratory six hours a week).

Evening Division: Not offered 1948-49.

CHEMISTRY 8. *Physical Chemistry*

The gaseous and liquid states; solids; solutions; equilibrium in homogeneous and heterogeneous systems; kinetics of reactions; periodic law and atomic structure; colloids and surface phenomena; electrochemistry; thermochemistry and thermodynamics.

TEXTS: Getman and Daniels, *Outlines of Physical Chemistry*, 7th edition (Wiley).

Daniels, Mathews and Williams, *Experimental Physical Chemistry* (McGraw Hill, 1941).

PREREQUISITES: Chemistry 6 and Mathematics 2.

Day Division: 1948-49 and alternate years (lectures three hours a week, laboratory three hours a week).

Evening Division: 1949-50 and alternate years.

CHEMISTRY 9. *Biochemistry*

The chemistry of plant and animal substances and the processes of metabolism and nutrition.

TEXT: To be announced.

PREREQUISITE: Chemistry 2.

Day Division: 1949-50 and alternate years.

Evening Division: 1948-49 and alternate years (lectures two hours a week, laboratory two to three hours a week).

COMMERCE

Assistant Professor . . . F. J. Turner, B.Com., M.A.

Lecturer Agnes Y. Fleming, B.Com., B.Ed.

Sessional Lecturers . . . M. E. Corlett, B.A.

J. T. Montague, M.A.

COMMERCE 1. *Commercial Law*

The law of contract and agency, sale of goods, negotiable instruments, partnerships and companies, bankruptcy and insolvency, bills of sale and chattel mortgages.

Day Division: Annually (lectures three hours a week).

Evening Division: Annually (lectures two hours a week).

COMMERCE 2. *Business Finance*

A study of the capital of business; methods and costs of raising capital; shares and bonds; the capital market; operating problems, dividends, reserves, combinations; bankruptcy.

PREREQUISITE: Economics 2.

Day Division: 1948-49 (lectures three hours a week).

Evening Division: Not offered 1948-49.

COMMERCE 3. *Management Techniques*

The problems of the business firm and techniques used in solution in the fields of personnel, manufacturing, buying and selling.

PREREQUISITE: Economics 2.

Day Division: 1948-49 (lectures three hours a week).

Evening Division: Not offered 1948-49.

COMMERCE 4. *Labour Problems*

An outline of the problems related to wages, working conditions, unemployment, promotion; attempts of workers to meet these problems; attitudes and policies of employers; the place of the state.

PREREQUISITE: Economics 2.

Day Division: 1948-49 (lectures three hours a week).

Evening Division: Not offered 1948-49.

COMMERCE 5. *Marketing*

The essential organizations and operations of marketing; the performance of the various marketing agencies at retail and wholesale levels; advertising; market research and analysis. (Students taking this course will be encouraged to take part-time

employment in local marketing organizations and will be assisted in arranging such employment.)

PREREQUISITE: Economics 2.

Day Division: 1948-49 (lectures three hours a week).

Evening Division: Not offered 1948-49.

COMMERCE 6. *Business Problems*

A study of the operations of business to discover how it has met problems of capitalization, production, control, personnel and marketing. From this study detailed blueprints for the initiation of a small business will be drawn up.

PREREQUISITE: Open to students in the fourth year of the B.Com. course.

Day Division: 1948-49 (lectures three hours a week).

Evening Division: Not offered 1948-49.

ECONOMICS

Assistant Professor . . . H. S. Gordon, M.A.

Sessional Lecturers . . . W. E. Duffett, B.Com., M.Sc. (Econ.)

Claude Isbister, A.M., Ph.D.

R. W. Lawson, M.A.

Frank Shefrin, B.S.A., M.S.

G. S. Watts, M.A.

David Ivor, M.A., Ph.D.

Samuel Trachtenberg, M.A.

H. H. Coulson, M.A.

ECONOMICS 2. *Principles of Economics*

Markets and equilibrium price. Wants and demand schedules; production, costs and supply schedules. Competition and monopoly. The agents of production; their controllable and non-controllable characteristics, and their market prices. Interdependence of prices and role of the price system. Income and its distribution; money and changes in its purchasing power. Elements of business cycles.

Day Division: Annually (lectures two hours a week, group discussion one hour a week).

Evening Division: Annually (lectures two hours a week). Also Summer 1948 (lectures five hours a week).

ECONOMICS 3. *Canadian Economic History and Geography*

The growth of civilization on the North American continent. The influences of environment and the impact of ideas and institutions from other areas on North American development.

Day Division: Annually (lectures two hours a week, group discussion one hour a week).

Evening Division: Annually (lectures two hours a week).

ECONOMICS 4. *Economics for Engineers*

The object of this course is to give Engineering students an introduction to some of the economic problems existing in the world of today, with particular reference to Canada.

Day Division: Annually, for second year Engineering students only (lectures one hour a week).

Evening Division: Not offered.

ECONOMICS 5. *Natural Resources of Canada* (Formerly Economics 100)

Forest, mineral and water; character and distribution; development, utilization and conservation; problems and policies. Special attention will be given to the problems of development in Canada's Northland.

PREREQUISITE: Economics 2.

Day Division: Not offered 1948-49.

Evening Division: 1948-49 and alternate years (lectures two hours a week).

ECONOMICS 6. *Agricultural Organization and Policy* (Formerly Economics 101)

The economic organization of Canadian agriculture; the position of agriculture in the Canadian economy and the impacts on it of government policy and international trade.

PREREQUISITE: Economics 2. Recommended: Economics 5.

Day Division: Not offered 1948-49.

Evening Division: 1948-49 and alternate years (lectures two hours a week).

ECONOMICS 7. *International Trade* (Formerly Economics 102)

It is the aim of this course to provide the student with a wide working basis. The first half of the course deals with the mechanics of international trade, the foreign exchange market, bills of exchange, the balance of payments, tariffs, foreign exchange control, etc. Attention is then turned to the theory of international trade, from the more primitive concepts down to the recent analytical structures. Throughout the balance of the course some attention will be given to special studies of topical interest. But the primary aim is to put to practical use the knowledge of the mechanics and theoretical tools of international trade gained earlier in the course, through an interpretation of several phases of Canadian economic history relating to the international field.

PREREQUISITES: Economics 2 and 3.

Day Division: Not offered 1948-49.

Evening Division: 1948-49 (lectures two hours a week).

ECONOMICS 8. *Money and Banking* (Formerly Economics 103)

The theory and practice of banking and finance, with specific reference to the purposes and functions of the country's important financial institutions. Attention will be called to the role of money and finance in the production and distribution of the national income and in the problem of full employment. Relevant problems of international trade and foreign exchange standards will also be introduced.

PREREQUISITE: Economics 2.

Day Division: Annually (lectures two hours a week, group discussion one hour a week).

Evening Division: 1949-50 and alternate years (lectures two hours a week).

Also Summer 1948 (lectures five hours a week).

ECONOMICS 9. *Advanced Economics Theory* (Formerly Economics 104)

A critical examination of modern aggregate economic theory and its application to modern problems, particularly the business cycle and employment.

PREREQUISITES: Economics 2 and 8.

Day Division: Annually (lectures two hours a week, group discussion one hour a week).

Evening Division: Not offered 1948-49.

ECONOMICS 10. *Economic History* (Formerly Economics 105)

This course is concerned with tracing the economic development from feudalism to finance capitalism, particularly in the United Kingdom and the United States.

PREREQUISITE: Economics 3.

Day Division: Not offered 1948-49.

Evening Division: 1948-49 (lectures two hours a week).

ECONOMICS 11. *Public Finance* (Formerly Economics 106)

The course deals with the financial aspects of the relation of the state to economic life. The first part of the course examines, in general terms, the changing economic role of the state, the nature and extent of public expenditure, and the ways in which this expenditure can be financed. In particular the traditional principles of taxation are thoroughly examined. The latter part of the course covers the development of Canadian public finance from Confederation to the present day in the light of changing national economic conditions. A final survey covers the characteristics and problems of public finance in Canada at present and the outlook for the immediate future. An attempt is made to evaluate these characteristics and problems in the light of the principles studied in the first part of the course.

PREREQUISITES: Economics 2 and 8.

Day Division: Not offered 1948-49.

Evening Division: 1948-49 and alternate years (lectures two hours a week).

ECONOMICS 12. *Governmental Economic Policy* (Formerly Economics 107)

A review of the development of economic policy on all government levels during recent decades. With this review as a background, a more exhaustive analysis will be made of the extent to which the Canadian government has become involved in formulating and carrying out economic policies in selected fields, such as finance, manpower, agriculture and the development of natural resources.

PREREQUISITES: Economics 2 and 3.

Not offered 1948-49.

ECONOMICS 13. *Canadian Economic Institutions*

The purpose of this course is to describe in detail and evaluate Canadian economic institutions of industry, trade and government. (Half course)

PREREQUISITE: Economics 2.

Day Division: 1949-50 and annually thereafter.

Evening Division: Not offered 1948-49.

See also courses in Commerce, pp. 54-55.

ENGINEERING

Assistant Professor . . . E. W. Stedman, C.B., O.B.E., etc.

Sessional Lecturers . . . W. L. Cassels, B.Sc., M.E.I.C.

H. E. MacLean

Gordon Shorter, B.Sc.

A. C. Tuttle, B.Sc. (C.E.)

Instructor C. W. Taylor

All courses in this group are offered annually, in the day division only.

ENGINEERING 1. *Mechanics*

Statics. Fundamental principles of the laws of equilibrium of forces; application to the determination of stresses in simple structures.

Dynamics. General equations of motion; work, energy and momentum, angular momentum, simple harmonic motion.

Lectures two hours a week, both terms. Laboratory two hours a week, both terms.

ENGINEERING 2. *Applied Mechanics*

Statics. Coplanar, concurrent, parallel and non-concurrent force systems. Graphically and mathematically. Flexible cables; friction, centroid, centres of gravity, moment of inertia.

Dynamics. Kinematics of a particle; kinematics of a rigid body; curvilinear motion; rotation; work energy and power; impulse and momentum.

Hydraulics. Fluid properties; fluid statics; pressure, density, height relationships. Measurement of pressure intensity; fluid thrust in submerged surfaces. Buoyancy and flotation.

TEXTS: Girvin, *Applied Mechanics*.
 Ellis, *Elements of Hydraulic Engineering*.

PREREQUISITE: Engineering 1.

Lectures two hours a week, both terms. Laboratory two hours a week, both terms.

ENGINEERING 3. *Descriptive Geometry*

A continuation of the work taken in Engineering 12 (Mechanical Drawing I), including solution of problems involving point, line and plane, revolution, intersection of surfaces, perspective drawing; mining problems.

TEXT: Warner, *Applied Descriptive Geometry*.

PREREQUISITE: Engineering 12.

Lectures and laboratory two hours a week, both terms.

ENGINEERING 4. *Materials of Engineering*

A. Manufacture of iron and steel, non-ferrous metals and alloys; wood, stone and brick, concrete, plastics, rubber.

TEXT: Moore, *Materials of Construction*.

B. Strength of materials: resistance, elasticity, stress, strain, tension, empression, torsion bending, slender columns.

TEXT: Seely, *Resistance of Materials*.

Lectures one hour a week first term, two hours a week second term.

ENGINEERING 5. *Mechanics of Machines*

Displacement, velocity, acceleration, instant centres, velocity and acceleration in plane motion, slide crank, cams, rolling contact, tooth gearing, involute teeth, gear trains, belt length, general principles for belts, special mechanics, crank effort.

TEXTS: Guillet, *Kinematics of Machine*.

Headley, *Work Book in Kinematics*.

Lectures two hours a week, laboratory two hours a week, *first term*.

ENGINEERING 6. *Heat Engines, Elementary*

History and development of heat engines principles, description of mechanical and thermal features, fuels.

TEXT: Allcut, *Introduction to Heat Engines*.

Lectures one hour a week, *second term*.

ENGINEERING 7. *Engineering Problems I*

Working out problems under supervision. The problems are based on the current work in the classes.

Problem periods, three hours a week, both terms.

ENGINEERING 8. *Engineering Problems II*

Working out problems under supervision. The problems are based on the current work in the classes.

Problem periods, one hour a week first term, two hours a week second term.

ENGINEERING 9. *Surveying Field Work*

An obligatory summer school in surveying for all first year Engineering students is held under arrangement with McGill University for a period of four weeks in the spring or, alternatively, in the fall, following the first year's work at Carleton College.

ENGINEERING 10. *Surveying I*

General principles and practice of surveying with the chain, transit and level. Field work.

TEXT: *Elementary Surveying* (University of Toronto Press).

Lectures one hour a week, both terms. Approximately six to eight hours will be devoted to instrument and field work in the first term.

ENGINEERING 11. *Surveying and Mapping II*

Continuation of the work of Engineering 10 (Surveying 1), including mapping.

TEXT: Breed, *Surveying*.

Lectures one hour a week, laboratory three hours a week, both terms.

ENGINEERING 12. *Mechanical Drawing I*

Fundamental drawing techniques and their application to the solution of engineering problems, lettering, the use of instruments and materials, freehand orthographic projection and pictorial sketching, auxiliary views, sections, pictorial drawings, fasteners, dimensioning, working drawings, assembly drawings, tracing, checking, blueprinting and shop terms. Also work in projection involving true lengths and shapes, developed surfaces and intersections.

TEXTS: French, *Engineering Drawing*, 7th edition.

Svensen, Schuman and Street, *Drafting Problem Layout*, Series B.

Warner, *Applied Descriptive Geometry*.

Laboratory six hours a week, both terms.

ENGINEERING 13. *Mechanical Drawing II*

Continuation of the work of Engineering 12 (Mechanical Drawing 1). Conventions, sections, assembly drawings; use of references.

TEXT: To be announced.

Laboratory three hours a week, both terms.

ENGINEERING 14. *Engineering and Society*

A series of lectures intended to show the relation between the work of engineers and society.

TEXT: Young, Innis and Dale, *Engineering and Society* (University of Toronto Press).

Lectures one hour a week, *second term*.

ENGINEERING 15. *Public Speaking for Engineers*

Each engineering student is given the opportunity to address the class and visitors, on an engineering subject, during the second year.

Practice, one hour a week, *second term*.

ENGLISH LANGUAGE AND LITERATURE

Assistant Professors . . . A. M. Beattie, B.A.

W. P. Wilgar, M.A.

Lecturer M. M. MacOdum, M.A., Ph.D.

Sessional Lecturer . . . P. V. Alexander, B.A.

Assistants Charlotte Brown, B.A.

Dorothy Chamberlin, M.A.

English 1 or 11 will be taken in the first year. Students in the day division who do not plan to continue the study of English beyond their second year, and all students in the evening division, will take English 2 in their second year. Candidates for the pass or general honours degree in the day division who plan further study of English beyond the second year will choose English 4 in the second year and will follow that course with English 5, 3 and 7, in that order.

Candidates for a degree with specific honours in English Language and Literature should attend as many of the courses offered as their timetable permits. English 8 and 9, both of which should be taken in the same year, are preliminary to all honours courses in English. Each honours student will plan his programme

and pursue his courses under the supervision of a departmental adviser to whom he will make frequent and regular reports on his reading. He will participate in at least six seminars: S1, S2, S7, and any three others.

A student of English is expected to possess and use a good dictionary. These are recommended:

The Concise Oxford Dictionary (Oxford)

Webster's Collegiate Dictionary (Thomas Allen, Toronto)

The American College Dictionary (Harper).

Also, every student of English should have available for frequent reference a handbook. Recommended:

Writer's Guide and Index to English (Gage, Toronto)

ENGLISH 1. *Introduction to English Literature*

Study of selected plays, poems, and short stories. The purpose of the course is to acquaint the student with basic principles of literary appreciation and with the chief forms and modes of literary expression. (English 1 and 11 are alternative first year courses.)

TEXTS: To be announced.

Day Division: Annually (lectures three hours a week).

Evening Division: Evening students take English 11.

ENGLISH 2. *English Literature from Beowulf to the Present*

A survey of English literature from the eighth to the twentieth century—a course for evening students and for day students who do not elect English as a continuation subject. Essay-writing and regular participation in discussion groups are required.

TEXT: *The College Survey of English Literature*, Shorter Edition (Harcourt, Brace, 1945).

PREREQUISITE: English 1 or 11.

Day Division: Annually (lectures three hours a week, group discussion one hour a week).

Evening Division: Annually (lectures two hours a week). Also Summer 1948 (lectures five hours a week).

ENGLISH 3. *English Literature from 1885 to the Present*

PREREQUISITE: English 2 or English 4 and 5.

Day Division: 1949-50 and annually thereafter.

Evening Division: Not offered 1948-49.

ENGLISH 4. *English Literature from Beowulf to Dr. Johnson*

A historical study of the principal literary tendencies, types and authors through the Middle Ages, the Tudor and Jacobean periods, the era of the Civil War, the Restoration, and the early eighteenth century. Although devoted to a general outline of literary developments, the course will expect of the student an acquaintance with certain masterworks (of some, only selected parts): *Beowulf* (in modern English), *The Canterbury Tales*, *The Tragical History of Doctor Faustus*, *Antony and Cleopatra*, *The Way of the World*, *All for Love*, *Samson Agonistes*, *Paradise Lost*, *Gulliver's Travels*, *The Life of Samuel Johnson*, *Moll Flanders*, *Tom Jones*, *The School for Scandal*. Essay-writing and regular participation in discussion groups are required.

TEXT: *The Literature of England*, Vol. I, Third Edition (Gage, 1947)
(N.B. Only the *third* edition is complete.)

PREREQUISITE: English 1 or 11. (Not open to students who have taken English 2).

Day Division: Annually (lectures three hours a week, group discussion one hour a week).

Evening Division: Not offered 1948-49.

ENGLISH 5. *The Literature of the Romantic Movement and the Victorian Period*

PREREQUISITE: English 4. (Not open to students who have taken English 2).

Day Division: 1949-50 and annually thereafter.

Evening Division: Not offered 1948-49.

ENGLISH 6. *Life and Works of Shakespeare*

A study of the mediaeval origins of English drama, its development to and through the sixteenth and early seventeenth centuries; a survey of theatrical conditions of the Elizabethan period; lectures on the chief Elizabethan and Jacobean dramatists; intensive study of Shakespeare's environment and development as a dramatist, with careful reading of certain plays. (Additional readings in English drama will be required of specific honours students.)

TEXT: A good one-volume edition of Shakespeare's plays. Recommended:

Kittredge (ed.), *The Complete Works of Shakespeare* (Ginn, 1936)

Neilson and Hill (editors), *The Complete Plays and Poems of William Shakespeare* (Houghton Mifflin, 1942).

PREREQUISITE: English 2 or English 4 and 5.

Offered as the third year pass course in English for 1948-49:

Day Division: Annually (lectures three hours a week, seminar for honours students one hour a week).

Evening Division: 1948-49 (lectures two hours a week).

ENGLISH 7. *American and Canadian Literature*

TEXTS: Foerster (ed.), *American Poetry and Prose*, Vols. I and II
(Houghton Mifflin, 1947)

Hawthorne, *The Scarlet Letter*

Melville, *Moby Dick*

Twain, *The Adventures of Huckleberry Finn*

James, *The Ambassadors*

Dreiser, *An American Tragedy*

Lewis, *Babbitt*

Wolfe, *Look Homeward, Angel*

Steinbeck, *The Grapes of Wrath*.

PREREQUISITE: English 2 or 3 or English 4 and 5.

Offered in 1948-49 as the fourth year pass course in English.

Day Division: 1948-49 (lectures three hours a week).

Evening Division: 1948-49 (lectures two hours a week).

ENGLISH 8. *Introduction to Honours in English*

A preparatory course devoted to consideration of critical principles, methods of study and research in literature, bibliography, use of libraries, literary forms and types, elements of prosody, outlines of literary history. Careful study of representative works from European, English and American literature.

TEXTS: To be announced.

PREREQUISITE: Open to students in honours English.

Day Division: Annually (lectures two hours a week, seminar one hour a week).

Evening Division: Not offered.

ENGLISH 9. *Introduction to Mediaeval Literature*

A survey of literary types, authors and chief works between the Norman Conquest and the fifteenth century.

TEXTS: Cook, *A Literary Middle English Reader* (Ginn, 1915)

Robinson, *Chaucer's Complete Works*, Student's Cambridge Edition (Houghton Mifflin, 1933).

PREREQUISITE: Open to students in honours English.

Day Division: Annually (lectures two hours a week, seminar one hour a week).

Evening Division: Not offered.

ENGLISH 10. *English Composition*

A review and practice course for first year students who have not obtained senior matriculation standing of at least 3rd class in English composition. Other students, of any year, who show deficiencies in expression may be required to take all or certain parts of English 10. The course will be conducted by means of a weekly lecture class, regular writing assignments, frequent tests, and individual conferences with the instructor. (This course carries credit only as part of English 1 or 11 and may be taken only by students enrolled in another course in English.)

TEXT: *Writer's Guide and Index to English* (Gage, 1942).

Day Division: Annually (lectures one hour a week, group discussion one hour a week).

Evening Division: Annually (lectures one hour a week).

ENGLISH 11.

The course in English literature prescribed for Grade XIII by the Ontario Department of Education. (English 1 and 11 are alternative first year courses.)

TEXTS: To be announced.

Day Division: Day students take English 1.

Evening Division: Annually (lectures two hours a week).

ENGLISH 12. *English for Engineering Students*

A course in literature and composition for Engineering students.

Day Division: Annually, for first year Engineering students only (lectures two hours a week).

Evening Division: Not offered.

ENGLISH 13. *English for Commerce Students*

A reading, discussion, and writing course for third-year Commerce students.

TEXTS: A list of titles may be obtained from the Registrar.

PREREQUISITE: English 2.

Day Division: 1949-50 and annually thereafter as a half course (group discussion one hour a week).

Evening Division: Not offered.

SEMINARS

Honours students will meet in small groups, usually once a week, for discussion of readings assigned. Students will be expected to take turns in reading essays on prescribed topics and/or conducting discussions. Essay-writing in the honours courses will be prescribed through the seminars. There will be no examinations for these groups. (Credit for seminars will be given only in connection with lecture courses.)

Not all of the following topics will be offered in any one year. The annual choice of seminars will depend on the number of students registered in English honours and on their specific needs.

ENGLISH S1. *Classics of the Western Tradition*

Reading, in English translations, of *The Odyssey*, passages from *The Iliad*, passages from the *Old Testament*, Dante's *Inferno*, selected essays by Montaigne.

ENGLISH S2. *The Life and Works of Chaucer*

With special attention to *The Canterbury Tales* and *Toihus and Criseyde*.

ENGLISH S6. *Elizabethan Drama*

Study of representative plays by Kyd, Marlowe, Jonson, Lyly, Webster and others.

ENGLISH S7. *Literary Criticism from Aristotle to the Present*

Not offered 1948-49.

ENGLISH S12. *Canadian Poetry since Confederation*

FINE ARTS

Sessional Lecturers . . . R. H. Hubbard, M.A., Ph.D.
J. K. B. Robertson, M.A.

Courses in the history of art are offered by Carleton College in conjunction with the National Gallery of Canada. The collections and study materials of the National Gallery afford the student unusual opportunities for direct observation.

FINE ARTS 1. *A Survey of Art in Europe and America*

A survey from prehistoric to modern times. The architecture, sculpture and painting of the successive periods are studied with the object of indicating the special forms of beauty characteristic of each period, and of interpreting art in terms of the historical, religious and economic backgrounds.

TEXTS: Roos, *An Illustrated Handbook of Art History* (Macmillan)

Pevsner, *An Outline of European Architecture* (Pelican, 1945).

Day Division: 1948-49 and alternate years (lectures two hours a week).

Evening Division: 1949-50 and alternate years (lectures two hours a week).

FINE ARTS 2. *The Art of North America*

The architecture, sculpture and painting of Canada, the United States and Mexico from colonial times to the present are studied in relation to European art; special emphasis is placed on Canadian art and its cultural background.

TEXT: Richardson, *The Way of Western Art* (Harvard, 1939).

Not offered 1948-49.

FINE ARTS 3. *Renaissance and Baroque Art*

Painting, sculpture and architecture from the fifteenth to the eighteenth centuries with special emphasis on the great painters.

TEXT: To be announced.

Day Division: Not offered 1948-49.

Evening Division: 1948-49 (lectures two hours a week).

FRENCH

Lecturers J. Perry Young, B.A., D.ès L.
J. S. Tassie, M.A.

Sessional Lecturers . . . A. J. Bénéteau, M.A., Ph.D.
Adélard Gascon, M.A., Ph.D., B.Paed.

FRENCH 1.

As Carleton College is situated in a centre where French is spoken by a large percentage of the population, much stress will be laid on oral French with the aim of having the students acquire a speaking knowledge of the language. The lectures will be conducted in French, as far as possible, and conversational topics of common interest will frequently be discussed in class. The students will be encouraged to do a good deal of French supplementary reading from books recommended by the instructors. In addition to the regular text book exercises, the students will be required to hand in short essays in French based on familiar themes.

TEXTS: To be announced.

Day Division: Annually (lectures three hours a week).

Evening Division: Annually (lectures two hours a week).

FRENCH 2.

Introduction to nineteenth century French literature. Composition and oral French.

TEXTS: Bovée and Carnahan, *New French Review Grammar* (Heath)
Irving and King, *Vingt et Un Contes* (Harper)
Labiche, *La Grammaire* (Copp Clark)
Halévy, *L'Abbé Constantin* (Copp Clark)
Romains, *Knock* (Copp Clark).

PREREQUISITE: French 1.

Day Division: Annually (lectures three hours a week).

Evening Division: Annually (lectures two hours a week). Also Summer 1948 (lectures five hours a week).

FRENCH 3.

French literature of the seventeenth and eighteenth centuries. Composition and oral French.

TEXTS: To be announced.

PREREQUISITE: French 2.

Day Division: Annually (lectures three hours a week).

Evening Division: 1948-49 and alternate years (lectures two hours a week).

FRENCH 4.

French literature and thought of the twentieth century. Literature of French Canada. Composition and oral French.

TEXTS: To be announced.

PREREQUISITE: French 3.

Day Division: Annually (lectures three hours a week).

Evening Division: 1949-50 and alternate years (lectures two hours a week).

GEOLOGY

Sessional Lecturers . . . F. J. Alcock, B.A., Ph.D., F.R.S.C.
M. E. Wilson, B.A., Ph.D., F.R.S.C.
J. M. Harrison, B.Sc., Ph.D.
Alice Wilson, B.A., Ph.D.

GEOLOGY 2. *General Geology*

A course of general geology with laboratory and field work.

TEXT: Longwell, Knopf, Flint, Schuchert and Dunbar, *Outlines of Geology*.

Day Division: Annually (lectures two hours a week, laboratory two hours a week).

Evening Division: Annually (lectures two hours a week; two or three Saturday afternoon excursions).

GEOLOGY 3. *Physiography and Structural Geology*

Land forms and their origin. Physiographic cycles. Influence of surface features on human activities. The interpretation of topographic and geological maps. Rock structures and their origin: folding, faulting, metamorphism.

TEXTS: Roebuck, *Geomorphology* (McGraw Hill)
Niven, *Structural Geology*.

PREREQUISITE: Geology 2.

Not offered 1948-49.

GEOLOGY 4. *Mineralogy*

Elementary crystallography; descriptive and determinative mineralogy of the common and more important minerals.

TEXT: To be announced.

PREREQUISITE: Geology 2 (may be taken concurrently).

Day Division: Not offered 1948-49.

Evening Division: 1948-49 (lectures two hours a week).

GEOLOGY 5. *Palaeontology*

The principles of palaeontology; the classification of invertebrates, their morphology and evolutionary history, with reference to the broader phases of evolution of vertebrates; and an introduction to the practical value of invertebrates in the interpretation of stratigraphy and historical geology.

REFERENCE TEXTS: Shimer, *An Introduction to the Study of Palaeontology*
Raymond, *Prehistoric Life*
Twenhofel and Shrock, *Invertebrate Palaeontology*.

PREREQUISITE: Geology 2.

Not offered 1948-49.

GERMAN

Sessional Lecturer . . . Richard Hoff, LL.D.

GERMAN A.

An elementary course in German language and literature, designed to meet the needs of students who enter the College with little or no knowledge of German. The work will comprise the elements of grammar, the building up of a basic vocabulary, translation exercises, and the reading of easy German prose and poetry. (Credit is given for this course only upon the subsequent completion of German 1. If taken to make up a matriculation deficiency, no credit is allowed.)

TEXTS: Hagboldt and Kaufman, *A Brief Course in German* (Heath)
Hauch, *Essential German* (Oxford).

READING: Durian, *Kai aus der Kiste* (Holt).

Day Division: Annually (lectures three hours a week).

Evening Division: Annually (lectures two hours a week).

GERMAN AA.

An elementary course for Science students. The work will comprise the elements of grammar, the building up of a basic vocabulary, exercises in translation and dictation, and the reading of some German scientific writings. (May be taken for credit only by Science students.)

TEXT: Fiedler and Sandbach, *A First German Course for Science Students* (Oxford).

Not offered 1948-49.

GERMAN 1.

In this course the main stress will be put on reading and oral practice, while translation from and into everyday German and a review of the elements of German grammar will not be neglected.

TEXTS: von Gruening, *A Graded Reference Grammar for Students of German* (Prentice Hall)

Stroebe, *Vom Alltag zur Literatur* (Holt)

Schinnerer, *Reading German* (Macmillan).

READING: Fulda, *Hoehensonne* (Appleton-Century).

PREREQUISITE: German A or its equivalent.

Day Division: Annually (lectures three hours a week).

Evening Division: Annually (lectures two hours a week).

GERMAN 2.

A comprehensive and more detailed review of German grammar; written and oral exercises in translation and composition; easy German conversation; reading of modern German prose and some of the masterworks of nineteenth century poetry; introduction to the reading of German classics.

TEXTS: von Gruening, *A Graded Reference Grammar for Students of German* (Prentice Hall)

Chiles, *German Composition and Conversation* (Ginn).

READING: Kleist, *Der zerbrochene Krug*

Collman, *Easy German Poetry for Beginners* (Ginn)

Kaestner, *Drei Maenner im Schnee*.

PREREQUISITE: German 1.

Day Division: Not offered 1948-49.

Evening Division: 1948-49 (lectures two hours a week).

GERMAN 3.

Advanced written and oral translation exercises and composition; sight translation; and conversation. Students will be encouraged to increase the fluency and correctness of their spoken German. Reading and discussion of modern German poetry and drama.

TEXTS: von Gruening, *A Graded Reference Grammar for Students of German* (Prentice Hall)

Chiles, *German Composition and Conversation* (Ginn).

READING: Hebbel, *Agnes Bernauer* (Oxford)

Bithell, *An Anthology of German Poetry 1880-1940* (Methuen).

PREREQUISITE: German 2.

Day Division: Not offered 1948-49.

Evening Division: 1949-50 and alternate years (lectures two hours a week).

GERMAN 4. *Administrative German*

A special course designed to meet the needs of people in the government and military service and others who have to become acquainted with the terminology of the German legal, constitutional and administrative systems.

TEXT: To be announced.

PREREQUISITE: German 1. Open to students of German 2, 3 and 5.

Not offered 1948-49.

GERMAN 5.

The lectures will be conducted in German, as far as possible. *Faust*, Part I, will be read in commemoration of Goethe's two hundredth birthday anniversary, August 28, 1949. An outline of the history of German literature will be given. Exercises in advanced translation and composition also will be included, although the main stress will be laid on oral practice and reading.

TEXTS: von Gruening, *A Graded Reference Grammar for Students of German* (Prentice Hall)

Wanstall, *Tests in German Composition and Grammar* (Harrap).

READING: Goethe, *Faust*, Part I

Keller, *Die drei gerechten Kammacher* (Heath).

PREREQUISITE: German 3 (may be taken concurrently).

Day Division: Not offered 1948-49.

Evening Division: 1948-49 and alternate years (lectures two hours a week).

GREEK

Lecturer D. M. Shepherd, M.A.

GREEK A. *Classical Greek*

A preparatory course for students who have not taken Greek for Junior Matriculation. (Credit is given for this course only upon the subsequent completion of Greek 1. If taken to make up a matriculation deficiency, no credit is allowed.)

TEXT: To be announced.

Day Division: Annually (lectures three hours a week).

Evening Division: Annually (lectures two hours a week).

GREEK AA. *Modern Greek*

An introductory course in Modern Greek. Elements of Greek grammar; reading of easy texts of prose and poetry; conversational Greek; translation from Greek to English and English to Greek. (Credit is given for this course only upon the subsequent completion of Greek 2.)

Not offered 1948-49.

GREEK 1. *Classical Greek*

The course is that prescribed for Grade XIII in the secondary schools of Ontario.

TEXT: To be announced.

PREREQUISITE: Greek A or its equivalent.

Day Division: Not offered 1948-49.

Evening Division: 1948-49 (lectures two hours a week).

GREEK 2. *Modern Greek*

Modern Greek literature, Modern Greek poets: Palamas, Droissinis, Polemis and others (selections). Modern Greek chroniclers and prose writers (selections). Grammar; translations. Particular care will be given to conversational Greek.

PREREQUISITE: Greek AA or its equivalent.

Not offered 1948-49.

HISTORY

Associate Professor . . . James A. Gibson, B.A., B.Litt., D.Phil.

Lecturers David M. L. Farr, M.A.

Gordon S. Couse, B.A.

Sessional Lecturers . . . J. M. McQueen, M.A.

Violet M. Nelson, B.A.

HISTORY 1. *Main Directions in Modern History, 1870-1919*

This course will provide a preliminary survey of the main global areas under the impact of industrialism, big-power imperialism, and the competing economic and political ideas of the pre-war period. It will also provide, through discussion groups, for a consideration of specific problems of population, resources, migration, and of the principle personalities of the period. (Although intended primarily for first year students, this course may be taken for upper-year credit in which case additional essays and reading will be required.)

TEXT: To be announced.

Day Division: Annually (lectures two hours a week, group discussion one hour a week).

Evening Division: Evening students take History 11.

HISTORY 2. *History of Europe, 1400-1789*

An introductory course in European history, beginning with the later Middle Ages in Western Europe and continuing on to the Renaissance and Reformation, the period of dynastic rivalry in the 16th century, the era of the wars of religion, the Commercial Revolution, the age of Louis XIV, the emergence of Russia and Prussia in European affairs, cultural trends after the Reformation and the eve of the French Revolution.

TEXT: Robinson and Shotwell, *An Introduction to the History of Western Europe* (Ginn, 1946).

PREREQUISITE: History 1 or 11.

Day Division: Not offered 1948-49.

Evening Division: Summer 1948 (lectures five hours a week).

Not offered 1948-49.

HISTORY 3. *New France and British America to 1791*

An introduction to the history of Canada and the United States, giving attention to geographic factors in North American history and the discovery and exploration of the continent; the settlement and development of the French Empire on the St. Lawrence, noticing its political institutions, economic life, and the seigneurial system, will be compared to the growth of the English Atlantic colonies in the 17th and 18th centuries. The course will conclude with the Anglo-French rivalry for North America, the American Revolution, and the effects of the Revolution settlement upon British North America.

TEXT: Long, *A History of the Canadian People*, Vol. I (Ryerson).

PREREQUISITE: History 1 or 11.

Day Division: Annually (lectures three hours a week).

Evening Division: Not offered 1948-49.

HISTORY 4. *History of Europe, 500-1450*

An introductory course in European history, beginning with the early Middle Ages and continuing through feudal times to the late Middle Ages. It will consider the empires of Rome and Islam, the German-Roman Empire and the Church, the rise of nation-states and the expansion of Western Europe, the economic and social backgrounds of the 14th and 15th centuries, and cultural developments throughout the period.

TEXT: Ferguson and Brunn, *Survey of Western Civilization*, Vol. 1 (Houghton-Mifflin).

PREREQUISITE: History 1 or 11.

Day Division: 1948-49 and alternate years (lectures three hours a week).

Evening Division: Not offered 1948-49.

HISTORY 5. *English History to 1689*

This course will consider the settlement of peoples and the growth of corporate life in early Britain; continental invasions and feudal organization; the emergence of an English spirit and its expression in the monarchy and Parliament. Careful attention will be given to the constitutional developments reflected both in national and local government under the Tudor and the Stuart sovereigns.

TEXT: Trevelyan, *History of England* (Longmans).

PREREQUISITE: History 2, 4 or 6.

Day Division: 1949-50 and alternate years (lectures three hours a week).

Evening Division: Not offered 1948-49.

HISTORY 6. *History of Europe, 1450-1648*

A continuation course beginning with Western Europe in the later Middle Ages leading on to a full consideration of the wars of religion. Attention will be given to the rise of Protestantism and of Catholic Reform, to the beginnings of dynastic rivalry and the consolidation of national states. The interrelation of political, economic and cultural factors will be discussed, together with some attention to documentary sources of the period.

TEXT: To be announced.

PREREQUISITE: History 1 or 11.

Day Division: 1949-50 and alternate years (lectures three hours a week).

Evening Division: Not offered 1948-49.

HISTORY 7. *British Expansion Overseas*

This course will begin with a survey of the movements of people and ideas from the great age of maritime discovery to the definition of the British Commonwealth of Nations and the creating of new concepts of the "dependent" empire. The interaction of official policy and commercial opinion will receive consideration, and special attention will be given to 20th century advances towards self-government.

TEXTS: Williamson, *A Short History of British Expansion* (Macmillan)

Knaplund, *The British Empire, 1815-1939* (Harpers)

Contemporary reading will be assigned.

PREREQUISITE: History 2, 4 or 6. Recommended: History 3. Beginning in 1949-50, History 6 will be prerequisite.

Day Division: 1949-50 and alternate years (lectures three hours a week).

Evening Division: 1950-51 (lectures two hours a week).

HISTORY 8. *History of the United States of America*

This course will consider the colonial background of American history, the American Revolution and the making of the Constitution, the expansion of the Union, the sectional struggle, the Civil War, the era of reconstruction, the emergence of modern America, the political history of the United States after 1877, and the United States in world politics.

TEXT: Faulkner, *American Political and Social History*, 5th edition (Crofts, 1948).

PREREQUISITE: History 1 or 11. Recommended: History 3. Beginning 1950-51, History 3 will be prerequisite.

Day Division: Annually (lectures three hours a week).

Evening Division: 1948-49 (lectures two hours a week).

HISTORY 9. *Mediaeval History and Western Civilization*

A survey course, primarily for students in the evening division, intended for credit in second or third year. The attempt will be to relate the philosophy and corporate complexion of mediaeval society to the growth of modern Europe. The interest will be mainly in the continuity of political ideas.

TEXT: Stephenson, *Mediaeval History*, Revised edition (Harpers).

PREREQUISITE: History 1 or 11.

Day Division: Not offered 1948-49.

Evening Division: 1949-50 (lectures and discussion two hours a week).

HISTORY 11. *North America and the Modern World*

This course will provide a general background for further studies in history. It will begin with a survey of main influences upon the North American continent and will lead on to a consideration of Canada's advance to nationhood within the British Commonwealth of Nations and to the rise of the United States as a world power. Attention will also be given to the course of international relations since 1914.

TEXT: McInnis, *North America and the Modern World* (Dent).

Day Division: Day students take History 1.

Evening Division: Annually (lectures two hours a week, group discussions monthly).

HISTORY 12. *History of Europe: Westphalia to Waterloo (1648-1815)*

This course will examine the ideas of absolute monarchy as in France under Louis XIV, the Puritan Revolution in England, the rise of Russia and changes in the Baltic, the rise of Prussia and the rebirth of Austria, the expansionist mentalities at work during the 18 century, the French Revolution and the impact of Bonapartism in Europe.

TEXT: To be announced.

PREREQUISITE: History 2, 4 or 6.

Day Division: 1949-50 and alternate years (lectures three hours a week).

Evening Division: 1949-50 (lectures two hours a week).

HISTORY 13. *Canada from 1791: The Evolution of Canadian Self-Government*

This course will consider at the outset the transition from French Canada to British North America, and the political conflicts which arose from differences in racial background and political experience. In addition to emphasis on the constitutional evolution from representative to responsible government, and from federation to autonomy, attention will be given to influences on the government of Canada from Britain and from the United States, and to the emergence of Canada into the world community.

TEXTS: Kennedy, *The Constitution of Canada* (Oxford)

Brebner, *North Atlantic Triangle* (Ryerson).

PREREQUISITE: History 3. (In 1948-49 this prerequisite will not be required of evening students.)

Day Division: 1948-49 and alternate years (lectures three hours a week).

Evening Division: 1948-49 (lectures two hours a week).

HISTORY 14. *History of Modern Europe, 1815-1919*

Modern European history, beginning with the French Revolution and continuing into the Napoleonic period, the Congress of Vienna, the era of revolutions in Europe, the making of Italy, the consolidation of Germany, the Franco-Prussian War, national policies after 1871, European imperialism in Africa and Asia, the First World War, the peace treaties and the League of Nations, national scenes between the wars, and the approach of the Second World War.

TEXT: To be announced.

PREREQUISITE: Two of: History 1, 2, 4, 6, 11, 12.

Day Division: 1948-49 and alternate years (lectures three hours a week).

Evening Division: Not offered 1948-49.

HISTORY 15. *English History from 1689*

This course will consider mainly the constitutional development of England from the Revolution Settlement until the outbreak of the First World War, with special reference to the development of cabinet government, the development of party mechanisms, reaction and reform in the parliamentary structure, and the social and political outlook of Victorian England. Opportunity will be offered for intensive work on documentary sources touching upon constitutional development.

TEXTS: Trevelyan, *History of England* (Longmans)

Robertson, *Select Statutes, Cases and Documents* (Methuen).

PREREQUISITE: History 5. Recommended: History 12.

Day Division: 1948-49 (lectures three hours a week).

Evening Division: Not offered 1948-49.

HISTORY 16. *An Introduction to International Relations, 1919-1939*

This course, designed primarily for honour students in history, political science, economics, public administration and journalism, will consider the peace settlement, 1919; the period of alliances; the growth and decline of the League of Nations; the return of power politics; the re-emergence of Germany and the end of the treaties. Facilities will be provided for work with official documents of the period; also for some intensive work on maps of the period.

TEXT: Carr, *International Relations between the Two World War, 1919-1939* (Macmillan).

RECOMMENDED FOR REFERENCE: Potter, *An Introduction to the Study of International Organization* (Appleton-Century)
Horrabin, *An Atlas of Current Affairs* (Gollancz-Knopf).

PREREQUISITE: By permission of the Department.

Day Division: 1948-49 (lectures one hour a week, seminars two hours a week).

Evening Division: Not offered.

JOURNALISM

*Professor, and Director of
the Department . . .*

Sessional Lecturers . . . Wilfrid Eggleston, M.B.E., B.A.
J. Douglas Leechman, B.Sc., M.A., Ph.D.
Ross Munro, O.B.E., B.A.
Alfred Sykes

JOURNALISM 1. *Introduction to Journalism*

A broad survey of the whole field. Discussion of free lance writing, with practical exercises in the magazine article, the newspaper feature and the short story. Marketing. Personal qualifications and opportunities. Some account will be given of outstanding journalists and publications in Canada and elsewhere.

TEXT: To be announced.

Day Division: Annually (lectures three hours a week).

Evening Division: Not offered.

JOURNALISM 2. *Fundamentals of Reporting*

Interviewing and news gathering. The nature of news values; how to recognize and collect news; how to analyse, organize and report it. This is mainly a practical course, based on assignments in reporting and other forms of writing.

TEXT: To be announced.

Day Division: Annually (lectures and laboratory periods, three hours a week; group discussions).

Evening Division: Not offered.

JOURNALISM 3. *Editing*

Copy-reading and head-writing. This course will provide practical instruction in the duties and responsibilities of the deskman, and training in reading copy and writing headlines. The responsibilities and opportunities of the editor in his community will be discussed: the ethics of journalism; freedom of the press; the law and the press; censorship in war and peace; news policy; the sources and interpretation of foreign news; layout; the use of illustrations.

TEXT: Bastian and Case, *Editing the Day's News* (Macmillan).

PREREQUISITE: Journalism 1.

Day Division: Annually (lectures three hours a week).

Evening Division: Not offered.

JOURNALISM 4. *Interpretative Reporting*

Coverage of governmental activities and other specialized fields such as business, music, drama, the film, politics, the popularization of science, the column, the book review. Development of sources and contacts. Writing for the ear in the radio newscast, the radio talk and commentary. This will be mainly a practical course based on assignments. Methods of research; filing; work in newspaper library and morgue.

TEXT: MacDougall, *Interpretative Reporting* (Macmillan).

PREREQUISITE: Journalism 2.

Day Division: Annually (lectures three hours a week).

Evening Division: Not offered.

JOURNALISM 5. *Career Seminar in Journalism*

Round table discussions with guest speakers. Each student in Journalism 5 will be required to choose a current topic of Canadian interest for extensive live research and study as preparation for an oral report, which will be followed by questioning from instructor and group. Vocational guidance. Groups will be arranged whenever possible to meet the needs of those who have special interests or ambitions.

PREREQUISITE: For fourth year Journalism students.

Day Division: Annually (Round table sessions, two to three hours a week).

Evening Division: Not offered.

LATIN

Lecturer D. M. Shepherd, M.A.

LATIN A.

A preparatory course for students who have not taken Latin for Junior Matriculation. (Credit is given for this course only upon the subsequent completion of Latin 1. If taken to make up a matriculation deficiency, no credit is allowed.)

TEXTS: Hettich and Maitland, *Latin Fundamentals* (Prentice-Hall)

High School Latin Reader (Ryerson).

Day Division: Not offered 1948-49.

Evening Division: Annually (lectures two hours a week).

LATIN 1.

Translation and interpretation of prescribed texts; sight translation; prose composition.

TEXTS: Breslove, *Latin Composition* (Gage)

Latin Prose Selections (Nelson)

Latin Poetry Selections (Nelson).

PREREQUISITE: Latin A or its equivalent.

Day Division: Annually (lectures three hours a week).

Evening Division: Annually (lectures two hours a week).

LATIN 2.

Translation and interpretation of prescribed texts; sight translation; prose composition.

TEXTS: *Vergil, Aeneid I-VI*, Page (Macmillan)

Cicero, *Pro Archia*, Reid (Pitt Press)

Oxford Book of Latin Verse, School edition (Oxford).

PREREQUISITE: Latin 1.

Day Division: Annually (lectures three hours a week).

Evening Division: Not offered 1948-49.

LATIN 3.

More extensive study of Vergil, Cicero and Livy, with Latin prose composition.

TEXTS: To be announced.

PREREQUISITE: Latin 2.

Day Division: Annually (lectures three hours a week).

Evening Division: Not offered 1948-49.

MATHEMATICS

Professor	L. N. Richardson, M.A., M.Sc.
Associate Professor . . .	M. S. Macphail, M.A., Ph.D.
Lecturers	J. W. Mayne, M.A., M.Sc.
	T. F. Morris, M.A., Ph.D.
Sessional Lecturers . . .	R. B. Gamble, B.Sc.
	Nathan Keyfitz, B.Sc.

MATHEMATICS 1. *Algebra, Geometry, Trigonometry*

(Any two of the above subjects constitute a full credit for students not intending to take further courses in mathematics. Students planning to take Engineering, Bachelor of Science or Bachelor of Commerce courses will take all three subjects. The tuition fee for one of the three is that of a half course; the fee for any two or three, taken in the same year, is that of a full course.)

TEXTS: Petrie, Baker, Levitt and MacLean, *Algebra*
 Durrant and Kingston, *A New Analytic Geometry*
 Miller and Rourke, *Plane Trigonometry and Statics*.

Day Division: Annually (lectures two hours a week in each subject).
Evening Division: Annually (lectures two hours a week in each subject).

MATHEMATICS 2. *Calculus*

An introductory course in differential and integral calculus, with emphasis on the fundamental processes and applications.

TEXT: Granville, Smith and Longley, *Elements of Differential and Integral Calculus*.

PREREQUISITE: Mathematics 1.

Day Division: Annually (lectures three hours a week).
Evening Division: Annually (lectures two hours a week). Also Summer 1948 (lectures five hours a week).

MATHEMATICS 3a. *Mathematics of Investment*

Simple and compound interest, discount, annuities, perpetuities, amortization, sinking funds, bonds, debentures, depreciation; probability and its application to life insurance. (Half course.)

TEXT: Hart, *Mathematics of Investment*.

PREREQUISITE: Mathematics 1.

Day Division: Annually (lectures two hours a week, both terms).
Evening Division: Annually (lectures two hours a week, *first term*).

MATHEMATICS 3b. *Mathematical Statistics*

Graphs tables, functions, frequency distributions, averages and measures of central tendency, dispersion, moments, linear trends, correlation theory, regression, the normal curve, sampling, applications to data in various fields. (Half course)

TEXT: Richardson, *Introduction to Statistical Analysis*.

PREREQUISITE: Mathematics 1.

Day Division: Annually (lectures two hours a week, both terms).
Evening Division. Annually (lectures two hours a week, *second term*).

MATHEMATICS 4a. *Algebra*

Solution of equations, determinants, curve filling and graphs, complex numbers, partial fractions, logarithms, annuities, sinking funds, infinite series. (Half course.)

TEXT: To be announced.

PREREQUISITE: Mathematics 1.

Day Division: Annually, for first year Engineering students only (lectures three hours a week, *second term*).
Evening Division: Not offered.

MATHEMATICS 4b. *Analytic Geometry*

Review of the conic sections and simple properties. Introduction to solid analytic geometry. (Half course.)

TEXT: To be announced.

PREREQUISITE: Mathematics 1.

Day Division: Annually, for first year Engineering students only (lectures three hours a week, *first term*).

Evening Division: Not offered.

MATHEMATICS 5. *Calculus*

Functional notation, limits, differentiation, maxima and minima, curvature. Integration with applications to simple problems concerning areas, volumes, lengths, centres of gravity, moments of inertia, work and pressure.

TEXT: Middlemiss, *Differential and Integral Calculus*.

PREREQUISITE: Mathematics 1.

Day Division: Annually, for first year Engineering students only (lectures three hours a week).

Evening Division: Not offered.

MATHEMATICS 6. *Calculus*

Partial differentiation, multiple integrals with applications to volumes, moments of inertia, Taylor's Theorem, hyperbolic functions, differential equations.

TEXT: Middlemiss, *Differential and Integral Calculus*.

PREREQUISITE: Mathematics 5.

Day Division: Annually, for second year Engineering students only (lectures three hours a week).

Evening Division: Not offered.

MATHEMATICS 7. *Spherical Trigonometry*

TEXT: To be announced.

PREREQUISITE: Mathematics 1.

Day Division: Annually, for second year Engineering students only (lectures one hour a week, *first term*).

Evening Division: Not offered.

MATHEMATICS 8. *Calculus and Differential Equations*

A second course in calculus continuing the work of Mathematics 2.

TEXTS: Granville, Smith and Longley, *Elements of Differential and Integral Calculus*

Miller, *First Course in Differential Equations*.

PREREQUISITE: Mathematics 2.

Day Division: Annually (lectures three hours a week).

Evening Division: 1948-49 and alternate years (lectures two hours a week).

MATHEMATICS 9a. *Solid Analytic Geometry*

(Half course.)

TEXT: Snyder and Sisam, *Analytic Geometry of Space*.

PREREQUISITE: Mathematics 1.

Day Division: 1948-49 (lectures three hours a week, *first term*).

Evening Division: Not offered 1948-49.

MATHEMATICS 10b. *Advanced Algebra*

Selected topics in higher algebra. (Half course.)

TEXT: To be announced.

PREREQUISITE: Mathematics 2.

Day Division: 1948-49 (lectures three hours a week, *second term*).

Evening Division: Not offered 1948-49.

MATHEMATICS 11. *Advanced Calculus*

TEXT: Woods, *Advanced Calculus*.

PREREQUISITE: Mathematics 8.

Day Division: Annually (lectures three hours a week).

Evening Division: 1949-50 and alternate years (lectures two hours a week).

MATHEMATICS 12a. *Complex Variable*

General properties of analytic functions. (Half course.)

TEXT: To be announced.

PREREQUISITE: Mathematics 11 (or Mathematics 8 if taken in 1947-48).

Day Division: Annually (lectures three hours a week, *first term*).

Evening Division: 1948-49 and alternate years (lectures two hours a week, *first term*).

MATHEMATICS 12b. *Transcendental Functions*

The Bessel and other functions studied by the methods of Mathematics 12a. (Half course.)

TEXT: To be announced.

PREREQUISITE: Mathematics 11 and 12a.

Day Division: Annually (lectures three hours a week, *second term*).

Evening Division: 1948-49 and alternate years (lectures two hours a week, *second term*).

MATHEMATICS 13. *Statistical Analysis*

A second course in statistics with emphasis on applications in the fields of business and economics. The course will include: frequency distributions, Chi squared test, non linear trends and curve fitting, measures of reliability, analysis of variance, analysis of time series, index numbers, correlation, statistical induction, sampling theory.

TEXT: Mills, *Statistical Methods*, revised edition.

PREREQUISITE: Mathematics 3b.

Day Division: Annually (lectures two hours a week).

Evening Division: Not offered 1948-49.

MATHEMATICS 14. *Statistical Services* (Formerly Statistics 2)

A review of the development of government statistics in Canada and their present status, with some reference to practice in other countries. Objectives and procedures will be discussed, both from the point of view of the statistical administrator and the user of numerical data. Theoretical considerations will be subordinated to problems of definition, collection and tabulation.

PREREQUISITE: Mathematics 1.

Day Division: Not offered 1948-49.

Evening Division: 1948-49 (lectures two hours a week).

MUSIC

Sessional Lecturer . . . Myron McTavish, Mus.B., L.T.C.M.,
F.A.G.O., Chm., F.C.C.O.

MUSIC 1. *Music in Western Civilization*

A survey of the rise of music in the occidental world from the time of the Greeks to the present day. The course is extensive rather than intensive and will serve as an introduction to the vast field of musical history, of which only small portions are dealt with in the usual texts.

TEXT: Finney, *A History of Music*.

Day Division: 1948-49 and alternate years (lectures three hours a week).

Evening Division: 1949-50 and alternate years (lectures two hours a week).

MUSIC 2. *Introduction to the Composition of Music*

This course aims to give the student the tools for, and some practice in, elementary composition.

TEXT: To be announced.

Day Division: 1949-50 and alternate years (lectures three hours a week).

Evening Division: 1948-49 and alternate years (lectures two hours a week).

PHILOSOPHY

Lecturer C. G. S. McKeown, M.A.

Sessional Lecturer . . . J. M. Wyatt, M.A.

PHILOSOPHY 2. *Introduction to Philosophy*

An attempt to promote clear and ordered thought about the individual and society. The principal ethical positions will be examined with a view to determining the basic criteria of moral judgments. In addition, the nature of philosophical interpretation in politics, science and religion will be introduced.

TEXTS: Wheelright, *A Critical Introduction to Ethics* (Doubleday Doran)

Hoople, Piper and Tolley, *Preface to Philosophy, Book of Readings* (Macmillan).

Day Division: Annually (lectures three hours a week).

Evening Division: Annually (lectures two hours a week). Also Summer 1948 (lectures five hours a week).

PHILOSOPHY 3. *History of Philosophy: Ancient*

Early Greek philosophy and the origin of science; the Sophists; the role of Socrates; Greek education; the social and political philosophy of Plato and Aristotle. Certain dialogues of Plato and selections from Aristotle will be studied intensively.

TEXTS: To be announced.

PREREQUISITE: Philosophy 2.

Day Division: Annually (lectures three hours a week).

Evening Division: 1948-49 (lectures two hours a week).

PHILOSOPHY 4. *History of Philosophy: Modern*

A survey of philosophy from the Renaissance, with special study of continental rationalism (Descartes, Spinoza, Leibniz), English empiricism (Locke, Berkeley, Hume), the critical philosophy of Kant; and an introduction to present-day thought. Readings in the original literature will be required.

TEXTS: To be announced.

PREREQUISITE: Philosophy 2 or 3.

Day Division: Annually (lectures three hours a week).

Evening Division: Not offered 1948-49.

PHILOSOPHY 5. *Logic*

An introduction to deductive logic; to a study of language; to induction and scientific method.

TEXT: Black, *Critical Thinking* (Prentice-Hall).

PREREQUISITE: Philosophy 4.

Day Division: 1949-50 and alternate years (lectures three hours a week).

Evening Division: Not offered 1948-49.

PHILOSOPHY 6. *Twentieth Century Philosophy*

This course is designed to conclude the historical survey of philosophy and also to provide a systematic investigation of certain main problems arising in present-day theory of knowledge. Readings will be assigned in the recent literature, especially in that of Broad, Price, Ayer, Russell and Lewis.

TEXTS: To be announced.

PREREQUISITE: Philosophy 4.

Day Division: 1950-51 and alternate years (lectures three hours a week).

Evening Division: Not offered 1948-49.

PHYSICS

Assistant Professors . . . A. M. Munn, M.Sc., Ph.D.

R. G. Love, M.A., Ph.D.

Lecturer H. J. Duffus, B.A.Sc.

Demonstrator T. J. S. Cole, B.Sc.

PHYSICS 1. *General Physics*

A survey course in general elementary physics.

PREREQUISITE: Mathematics 1 (may be taken concurrently).

Day Division: Annually (lectures two hours a week, problem periods two hours a week, laboratory two hours a week).

Evening Division: Annually (lectures two hours a week; problem periods and laboratory two hours a week, alternating).

PHYSICS 2a. *Properties of Matter*

A course in elementary heat and properties of matter. (Half course)

PREREQUISITES: Physics 1 and Mathematics 1. (Mathematics 2 will be taken concurrently by day students.)

Day Division: Annually (lectures two hours a week, problem periods two hours a week, laboratory two hours a week, *first term*).

Evening Division: Annually (lectures two hours a week; problem periods and laboratory two hours a week, alternating; *first term*).

PHYSICS 2b. *Wave Motion*

A course in wave motion, sound and elementary light (Half course)

PREREQUISITES: Physics 1 and Mathematics 1. (Mathematics 2 will be taken concurrently by day students.)

Day Division: Annually (lectures two hours a week, problem periods two hours a week, laboratory two hours a week, *second term*).

Evening Division: Annually (lectures two hours a week; problem periods and laboratory two hours a week, alternating; *second term*).

PHYSICS 3a. *Elementary Electricity*

A course in electrostatics, direct current flow, magnetism, and elementary electromagnetic phenomena. (Half course)

PREREQUISITES: Physics 1 and Mathematics 2.

Day Division: Annually (lectures two hours a week, problem periods two hours a week, laboratory two hours a week, *first term*).

Evening Division: Not offered 1948-49.

PHYSICS 3b. *Intermediate Electricity*

This is an extension of Physics 3a to cover more advanced topics in electromagnetics and alternating current theory. An introduction to the theory of vacuum tubes is made. (Half course)

PREREQUISITES: Physics 3a and Mathematics 2. Mathematics 8 should be taken previously or concurrently.

Day Division: Annually (lectures two hours a week, problem periods two hours a week, laboratory two hours a week, *second term*).

Evening Division: Not offered 1948-49.

PHYSICS 4a. *Thermodynamics*

An advanced course in heat and thermodynamics. (Half course)

PREREQUISITES: Physics 2a and Mathematics 2.

Day Division: 1948-49 (lectures two hours a week, problem periods two hours a week, *first term*).

Evening Division: Not offered 1948-49.

PHYSICS 5b. *Physical Optics*

An advanced course in physical optics. (Half course)

PREREQUISITES: Physics 2b and Mathematics 2.

Day Division: 1948-49 (lectures two hours a week, laboratory three hours a week, *second term*).

Evening Division: Not offered 1948-49.

PHYSICS 6a. *Statics and Dynamics of a Particle*

A discussion of the statics and dynamics of a particle. The methods of vector analysis will be taught and used throughout. (Half course)

PREREQUISITES: Physics 14b and Mathematics 2. Mathematics 8 should be taken previously or concurrently.

Day Division: 1948-49 (lectures two hours a week, problem periods two hours a week, *first term*).

Evening Division: Not offered 1948-49.

PHYSICS 7b. *Electromagnetism*

An advanced discussion of electricity and magnetism by the methods of vector analysis—leading to Maxwell's equations and their applications. (Half course)

PREREQUISITES: Physics 3b and 6a and Mathematics 2. Mathematics 8 should be taken previously or concurrently.

Day Division: 1948-49 (lectures two hours a week, problem periods two hours a week, *second term*).

Evening Division: Not offered 1948-49.

PHYSICS 8a. *Atomic Physics*

This will include the molecular-atomic theory of matter—leading up to the Bohr-Rutherford theory, and a discussion of spectroscopy. (Half course)

PREREQUISITES: Physics 14b and 3b and Mathematics 2.

Day Division: 1948-49 (lectures two hours a week, conferences two hours a week, *first term*).

Evening Division: Not offered 1948-49.

PHYSICS 9b. *Advanced Dynamics*

Statics and dynamics of rigid bodies, and some discussion of elastic bodies, hydrostatics and hydrodynamics. (Half course)

PREREQUISITES: Physics 6a and Mathematics 8.

Not offered 1948-49.

PHYSICS 10. *Modern Physics*

A course in modern physics including some discussion of quantum theory, relativistic theory and the philosophy of physics.

PREREQUISITE: Open to fifth year students honouring in physics or physics and mathematics.

Not offered 1948-49.

PHYSICS 11. *Laboratory Technique*

An advanced laboratory course designed to train students in laboratory technique.

PREREQUISITE: For students honouring or specializing in physics.

Day Division: Annually (laboratory six hours a week).

Evening Division: Not offered 1948-49.

PHYSICS 12. *Advanced Electronics*

An advanced course covering radio theory thoroughly, along with some mention of other fields of electronics. An introduction is made into transmission line problems.

PREREQUISITES: Physics 3a and 3b and Mathematics 2.

Day Division: 1948-49 (lectures two hours a week, laboratory three hours a week).

Evening Division: Not offered 1948-49.

PHYSICS 14b. *Mechanics*

A course in elementary mechanics, designed to accompany Physics 2a and 2b for Science students who will be continuing the study of physics or chemistry. (Half course)

PREREQUISITES: Physics 1 and Mathematics 1. Mathematics 2 should be taken previously or concurrently.

Day Division: Annually (lectures two hours a week, problem periods two hours a week, laboratory two hours a week, *second term*).

Evening Division: Not offered 1948-49.

POLITICAL SCIENCE

Assistant Professor . . . Frank MacKinnon, M.A.

Lecturer Paul Fox, M.A.

Sessional Lecturers . . . L. W. Moffitt, B.A., Ph.D.

John Garner, B.A.

R. A. MacKay, B.A., Ph.D., F.R.S.C.

C. E. McGaughey, M.A.

POLITICAL SCIENCE 1. *The Government of Canada*

An introductory course in government politics with particular reference to Canada. (Political Science 1 and 2 are alternative introductory courses.)

Not offered 1948-49.

POLITICAL SCIENCE 2. *Introduction to Political Science*

A study of modern political ideas and institutions, with special reference to the structure of democratic governments, particularly the government of Canada. (Political Science 1 and 2 are alternative introductory courses.)

TEXTS: Corry, *Democratic Government and Politics*

Dawson, *The Government of Canada*.

Day Division: Annually (lectures two hours a week, group discussion one hour a week).

Evening Division: Annually (lectures two hours a week). Also Summer 1948 (lectures five hours a week).

POLITICAL SCIENCE 3. *Comparative Government*

A comparative study of the governments of the United Kingdom, the United States of America, and the British Dominions.

TEXTS: Corry, *Democratic Government and Politics*
Ogg, *English Government and Politics*
Ogg and Ray, *Introduction to American Government*
Brady, *Democracy in the Dominions*.

PREREQUISITE: Political Science 1 or 2.

Day Division: Annually (lectures two hours a week, group discussion one hour a week).

Evening Division: Annually (lectures two hours a week). Also Summer 1948 (lectures five hours a week).

POLITICAL SCIENCE 4. *History of Political Theory*

A general introductory survey of the history and significance of political thought from ancient times to the present, together with an examination of the works of selected political thinkers and their place in national and international politics.

TEXTS: Sabine, *A History of Political Theory*
Coker, *Recent Political Thought*.

PREREQUISITE: Political Science 1 or 2.

Day Division: Annually (lectures two hours a week, group discussion one hour a week).

Evening Division: Annually (lectures two hours a week).

POLITICAL SCIENCE 5. *Early Political Theory and Institutions*

A detailed study of the development of political thought from earliest times to the 19th century.

TEXT: To be announced.

PREREQUISITE: Political Science 1 or 2.

Day Division: Annually (lectures two hours a week, group discussion one hour a week).

Evening Division: Not offered 1948-49.

POLITICAL SCIENCE 6. *Introduction to Public Administration*

A general introduction to the study of public administration including an examination of the position of the executive, legislative, administrative, and judicial functions in the modern state; cabinet government; administration and politics; administrative tribunals; the nature and place of administrative law in government; and related topics, together with a detailed examination of the principles of administration.

TEXT: To be announced.

PREREQUISITE: Political Science 1 or 2, and Political Science 3.

Day Division: Annually (lectures two hours a week, group discussion one hour a week).

Evening Division: Annually (lectures two hours a week).

POLITICAL SCIENCE 7. *Civil Service Principles and Legislation*

(Formerly Personnel Management 102)

A comparative study of the development of civil service personnel selection and organization in Canada, Great Britain and the United States. Topics to be studied include patronage and the spoils system, the merit system, structure and functions of typical Canadian Departments, principles of organization and classification, recruiting methods, examination programs and techniques, principles of promotion, "in-service" training, ex-service preferences, provincial and municipal civil services.

TEXT: To be announced.

PREREQUISITE: Political Science 1 or 2.

Day Division: Not offered 1948-49.

Evening Division: Annually (lectures two hours a week).

MATHEMATICS

Professor	L. N. Richardson, M.A., M.Sc.
Associate Professor	M. S. Macphail, M.A., Ph.D.
Lecturers	J. W. Mayne, M.A., M.Sc.
	T. F. Morris, M.A., Ph.D.
Sessional Lecturers	R. B. Gamble, B.Sc.
	Nathan Keyfitz, B.Sc.

MATHEMATICS 1. *Algebra, Geometry, Trigonometry*

(Any two of the above subjects constitute a full credit for students not intending to take further courses in mathematics. Students planning to take Engineering, Bachelor of Science or Bachelor of Commerce courses will take all three subjects. The tuition fee for one of the three is that of a half course; the fee for any two or three, taken in the same year, is that of a full course.)

TEXTS: Petrie, Baker, Levitt and MacLean, *Algebra*

Durrant and Kingston, *A New Analytic Geometry*

Miller and Rourke, *Plane Trigonometry and Statics*.

Day Division: Annually (lectures two hours a week in each subject).

Evening Division: Annually (lectures two hours a week in each subject).

MATHEMATICS 2. *Calculus*

An introductory course in differential and integral calculus, with emphasis on the fundamental processes and applications.

TEXT: Granville, Smith and Longley, *Elements of Differential and Integral Calculus*.

PREREQUISITE: Mathematics 1.

Day Division: Annually (lectures three hours a week).

Evening Division: Annually (lectures two hours a week). Also Summer 1948 (lectures five hours a week).

MATHEMATICS 3a. *Mathematics of Investment*

Simple and compound interest, discount, annuities, perpetuities, amortization, sinking funds, bonds, debentures, depreciation; probability and its application to life insurance. (Half course.)

TEXT: Hart, *Mathematics of Investment*.

PREREQUISITE: Mathematics 1.

Day Division: Annually (lectures two hours a week, both terms).

Evening Division: Annually (lectures two hours a week, *first term*).

MATHEMATICS 3b. *Mathematical Statistics*

Graphs tables, functions, frequency distributions, averages and measures of central tendency, dispersion, moments, linear trends, correlation theory, regression, the normal curve, sampling, applications to data in various fields. (Half course)

TEXT: Richardson, *Introduction to Statistical Analysis*.

PREREQUISITE: Mathematics 1.

Day Division: Annually (lectures two hours a week, both terms).

Evening Division. Annually (lectures two hours a week, *second term*).

MATHEMATICS 4a. *Algebra*

Solution of equations, determinants, curve filling and graphs, complex numbers, partial fractions, logarithms, annuities, sinking funds, infinite series. (Half course.)

TEXT: To be announced.

PREREQUISITE: Mathematics 1.

Day Division: Annually, for first year Engineering students only (lectures three hours a week, *second term*).

Evening Division: Not offered.

MATHEMATICS 4b. *Analytic Geometry*

Review of the conic sections and simple properties. Introduction to solid analytic geometry. (Half course.)

TEXT: To be announced.

PREREQUISITE: Mathematics 1.

Day Division: Annually, for first year Engineering students only (lectures three hours a week, *first term*).

Evening Division: Not offered.

MATHEMATICS 5. *Calculus*

Functional notation, limits, differentiation, maxima and minima, curvature. Integration with applications to simple problems concerning areas, volumes, lengths, centres of gravity, moments of inertia, work and pressure.

TEXT: Middlemiss, *Differential and Integral Calculus*.

PREREQUISITE: Mathematics 1.

Day Division: Annually, for first year Engineering students only (lectures three hours a week).

Evening Division: Not offered.

MATHEMATICS 6. *Calculus*

Partial differentiation, multiple integrals with applications to volumes, moments of inertia, Taylor's Theorem, hyperbolic functions, differential equations.

TEXT: Middlemiss, *Differential and Integral Calculus*.

PREREQUISITE: Mathematics 5.

Day Division: Annually, for second year Engineering students only (lectures three hours a week).

Evening Division: Not offered.

MATHEMATICS 7. *Spherical Trigonometry*

TEXT: To be announced.

PREREQUISITE: Mathematics 1.

Day Division: Annually, for second year Engineering students only (lectures one hour a week, *first term*).

Evening Division: Not offered.

MATHEMATICS 8. *Calculus and Differential Equations*

A second course in calculus continuing the work of Mathematics 2.

TEXTS: Granville, Smith and Longley, *Elements of Differential and Integral Calculus*

Miller, *First Course in Differential Equations*.

PREREQUISITE: Mathematics 2.

Day Division: Annually (lectures three hours a week).

Evening Division: 1948-49 and alternate years (lectures two hours a week).

MATHEMATICS 9a. *Solid Analytic Geometry*

(Half course.)

TEXT: Snyder and Sisam, *Analytic Geometry of Space*.

PREREQUISITE: Mathematics 1.

Day Division: 1948-49 (lectures three hours a week, *first term*).

Evening Division: Not offered 1948-49.

MATHEMATICS 10b. *Advanced Algebra*

Selected topics in higher algebra. (Half course.)

TEXT: To be announced.

PREREQUISITE: Mathematics 2.

Day Division: 1948-49 (lectures three hours a week, *second term*).

Evening Division: Not offered 1948-49.

MATHEMATICS 11. *Advanced Calculus*

TEXT: Woods, *Advanced Calculus*.

PREREQUISITE: Mathematics 8.

Day Division: Annually (lectures three hours a week).

Evening Division: 1949-50 and alternate years (lectures two hours a week).

MATHEMATICS 12a. *Complex Variable*

General properties of analytic functions. (Half course.)

TEXT: To be announced.

PREREQUISITE: Mathematics 11 (or Mathematics 8 if taken in 1947-48).

Day Division: Annually (lectures three hours a week, *first term*).

Evening Division: 1948-49 and alternate years (lectures two hours a week, *first term*).

MATHEMATICS 12b. *Transcendental Functions*

The Bessel and other functions studied by the methods of Mathematics 12a. (Half course.)

TEXT: To be announced.

PREREQUISITE: Mathematics 11 and 12a.

Day Division: Annually (lectures three hours a week, *second term*).

Evening Division: 1948-49 and alternate years (lectures two hours a week, *second term*).

MATHEMATICS 13. *Statistical Analysis*

A second course in statistics with emphasis on applications in the fields of business and economics. The course will include: frequency distributions, Chi squared test, non linear trends and curve fitting, measures of reliability, analysis of variance, analysis of time series, index numbers, correlation, statistical induction, sampling theory.

TEXT: Mills, *Statistical Methods*, revised edition.

PREREQUISITE: Mathematics 3b.

Day Division: Annually (lectures two hours a week).

Evening Division: Not offered 1948-49.

MATHEMATICS 14. *Statistical Services* (Formerly Statistics 2)

A review of the development of government statistics in Canada and their present status, with some reference to practice in other countries. Objectives and procedures will be discussed, both from the point of view of the statistical administrator and the user of numerical data. Theoretical considerations will be subordinated to problems of definition, collection and tabulation.

PREREQUISITE: Mathematics 1.

Day Division: Not offered 1948-49.

Evening Division: 1948-49 (lectures two hours a week).

MUSIC

Sessional Lecturer . . . Myron McTavish, Mus.B., L.T.C.M.,
F.A.G.O., Chm., F.C.C.O.

MUSIC 1. *Music in Western Civilization*

A survey of the rise of music in the occidental world from the time of the Greeks to the present day. The course is extensive rather than intensive and will serve as an introduction to the vast field of musical history, of which only small portions are dealt with in the usual texts.

TEXT: Finney, *A History of Music*.

Day Division: 1948-49 and alternate years (lectures three hours a week).

Evening Division: 1949-50 and alternate years (lectures two hours a week).

MUSIC 2. *Introduction to the Composition of Music*

This course aims to give the student the tools for, and some practice in, elementary composition.

TEXT: To be announced.

Day Division: 1949-50 and alternate years (lectures three hours a week).

Evening Division: 1948-49 and alternate years (lectures two hours a week).

PHILOSOPHY

Lecturer C. G. S. McKeown, M.A.

Sessional Lecturer . . . J. M. Wyatt, M.A.

PHILOSOPHY 2. *Introduction to Philosophy*

An attempt to promote clear and ordered thought about the individual and society. The principal ethical positions will be examined with a view to determining the basic criteria of moral judgments. In addition, the nature of philosophical interpretation in politics, science and religion will be introduced.

TEXTS: Wheelright, *A Critical Introduction to Ethics* (Doubleday Doran)

Hoople, Piper and Tolley, *Preface to Philosophy, Book of Readings* (Macmillan).

Day Division: Annually (lectures three hours a week).

Evening Division: Annually (lectures two hours a week). Also Summer 1948 (lectures five hours a week).

PHILOSOPHY 3. *History of Philosophy: Ancient*

Early Greek philosophy and the origin of science; the Sophists; the role of Socrates; Greek education; the social and political philosophy of Plato and Aristotle. Certain dialogues of Plato and selections from Aristotle will be studied intensively.

TEXTS: To be announced.

PREREQUISITE: Philosophy 2.

Day Division: Annually (lectures three hours a week).

Evening Division: 1948-49 (lectures two hours a week).

PHILOSOPHY 4. *History of Philosophy: Modern*

A survey of philosophy from the Renaissance, with special study of continental rationalism (Descartes, Spinoza, Leibniz), English empiricism (Locke, Berkeley, Hume), the critical philosophy of Kant; and an introduction to present-day thought. Readings in the original literature will be required.

TEXTS: To be announced.

PREREQUISITE: Philosophy 2 or 3.

Day Division: Annually (lectures three hours a week).

Evening Division: Not offered 1948-49.

PHILOSOPHY 5. *Logic*

An introduction to deductive logic; to a study of language; to induction and scientific method.

TEXT: Black, *Critical Thinking* (Prentice-Hall).

PREREQUISITE: Philosophy 4.

Day Division: 1949-50 and alternate years (lectures three hours a week).

Evening Division: Not offered 1948-49.

PHILOSOPHY 6. *Twentieth Century Philosophy*

This course is designed to conclude the historical survey of philosophy and also to provide a systematic investigation of certain main problems arising in present-day theory of knowledge. Readings will be assigned in the recent literature, especially in that of Broad, Price, Ayer, Russell and Lewis.

TEXTS: To be announced.

PREREQUISITE: Philosophy 4.

Day Division: 1950-51 and alternate years (lectures three hours a week).

Evening Division: Not offered 1948-49.

PHYSICS

Assistant Professors . . . A. M. Munn, M.Sc., Ph.D.

R. G. Love, M.A., Ph.D.

Lecturer H. J. Duffus, B.A.Sc.

Demonstrator T. J. S. Cole, B.Sc.

PHYSICS 1. *General Physics*

A survey course in general elementary physics.

PREREQUISITE: Mathematics 1 (may be taken concurrently).

Day Division: Annually (lectures two hours a week, problem periods two hours a week, laboratory two hours a week).

Evening Division: Annually (lectures two hours a week; problem periods and laboratory two hours a week, alternating).

PHYSICS 2a. *Properties of Matter*

A course in elementary heat and properties of matter. (Half course)

PREREQUISITES: Physics 1 and Mathematics 1. (Mathematics 2 will be taken concurrently by day students.)

Day Division: Annually (lectures two hours a week, problem periods two hours a week, laboratory two hours a week, *first term*).

Evening Division: Annually (lectures two hours a week; problem periods and laboratory two hours a week, alternating; *first term*).

PHYSICS 2b. *Wave Motion*

A course in wave motion, sound and elementary light (Half course)

PREREQUISITES: Physics 1 and Mathematics 1. (Mathematics 2 will be taken concurrently by day students.)

Day Division: Annually (lectures two hours a week, problem periods two hours a week, laboratory two hours a week, *second term*).

Evening Division: Annually (lectures two hours a week; problem periods and laboratory two hours a week, alternating; *second term*).

PHYSICS 3a. *Elementary Electricity*

A course in electrostatics, direct current flow, magnetism, and elementary electromagnetic phenomena. (Half course)

PREREQUISITES: Physics 1 and Mathematics 2.

Day Division: Annually (lectures two hours a week, problem periods two hours a week, laboratory two hours a week, *first term*).

Evening Division: Not offered 1948-49.

PHYSICS 3b. *Intermediate Electricity*

This is an extension of Physics 3a to cover more advanced topics in electromagnetics and alternating current theory. An introduction to the theory of vacuum tubes is made. (Half course)

PREREQUISITES: Physics 3a and Mathematics 2. Mathematics 8 should be taken previously or concurrently.

Day Division: Annually (lectures two hours a week, problem periods two hours a week, laboratory two hours a week, *second term*).

Evening Division: Not offered 1948-49.

PHYSICS 4a. *Thermodynamics*

An advanced course in heat and thermodynamics. (Half course)

PREREQUISITES: Physics 2a and Mathematics 2.

Day Division: 1948-49 (lectures two hours a week, problem periods two hours a week, *first term*).

Evening Division: Not offered 1948-49.

PHYSICS 5b. *Physical Optics*

An advanced course in physical optics. (Half course)

PREREQUISITES: Physics 2b and Mathematics 2.

Day Division: 1948-49 (lectures two hours a week, laboratory three hours a week, *second term*).

Evening Division: Not offered 1948-49.

PHYSICS 6a. *Statics and Dynamics of a Particle*

A discussion of the statics and dynamics of a particle. The methods of vector analysis will be taught and used throughout. (Half course)

PREREQUISITES: Physics 14b and Mathematics 2. Mathematics 8 should be taken previously or concurrently.

Day Division: 1948-49 (lectures two hours a week, problem periods two hours a week, *first term*).

Evening Division: Not offered 1948-49.

PHYSICS 7b. *Electromagnetism*

An advanced discussion of electricity and magnetism by the methods of vector analysis—leading to Maxwell's equations and their applications. (Half course)

PREREQUISITES: Physics 3b and 6a and Mathematics 2. Mathematics 8 should be taken previously or concurrently.

Day Division: 1948-49 (lectures two hours a week, problem periods two hours a week, *second term*).

Evening Division: Not offered 1948-49.

PHYSICS 8a. *Atomic Physics*

This will include the molecular-atomic theory of matter—leading up to the Bohr-Rutherford theory, and a discussion of spectroscopy. (Half course)

PREREQUISITES: Physics 14b and 3b and Mathematics 2.

Day Division: 1948-49 (lectures two hours a week, conferences two hours a week, *first term*).

Evening Division: Not offered 1948-49.

PHYSICS 9b. *Advanced Dynamics*

Statics and dynamics of rigid bodies, and some discussion of elastic bodies, hydrostatics and hydrodynamics. (Half course)

PREREQUISITES: Physics 6a and Mathematics 8.

Not offered 1948-49.

PHYSICS 10. *Modern Physics*

A course in modern physics including some discussion of quantum theory, relativistic theory and the philosophy of physics.

PREREQUISITE: Open to fifth year students honouring in physics or physics and mathematics.

Not offered 1948-49.

PHYSICS 11. *Laboratory Technique*

An advanced laboratory course designed to train students in laboratory technique.

PREREQUISITE: For students honouring or specializing in physics.

Day Division: Annually (laboratory six hours a week).

Evening Division: Not offered 1948-49.

PHYSICS 12. *Advanced Electronics*

An advanced course covering radio theory thoroughly, along with some mention of other fields of electronics. An introduction is made into transmission line problems.

PREREQUISITES: Physics 3a and 3b and Mathematics 2.

Day Division: 1948-49 (lectures two hours a week, laboratory three hours a week).

Evening Division: Not offered 1948-49.

PHYSICS 14b. *Mechanics*

A course in elementary mechanics, designed to accompany Physics 2a and 2b for Science students who will be continuing the study of physics or chemistry. (Half course)

PREREQUISITES: Physics 1 and Mathematics 1. Mathematics 2 should be taken previously or concurrently.

Day Division: Annually (lectures two hours a week, problem periods two hours a week, laboratory two hours a week, *second term*).

Evening Division: Not offered 1948-49.

POLITICAL SCIENCE

Assistant Professor . . . Frank MacKinnon, M.A.

Lecturer Paul Fox, M.A.

Sessional Lecturers . . . L. W. Moffitt, B.A., Ph.D.

John Garner, B.A.

R. A. MacKay, B.A., Ph.D., F.R.S.C.

C. E. McGaughey, M.A.

POLITICAL SCIENCE 1. *The Government of Canada*

An introductory course in government politics with particular reference to Canada. (Political Science 1 and 2 are alternative introductory courses.)

Not offered 1948-49.

POLITICAL SCIENCE 2. *Introduction to Political Science*

A study of modern political ideas and institutions, with special reference to the structure of democratic governments, particularly the government of Canada. (Political Science 1 and 2 are alternative introductory courses.)

TEXTS: Corry, *Democratic Government and Politics*

Dawson, *The Government of Canada*.

Day Division: Annually (lectures two hours a week, group discussion one hour a week).

Evening Division: Annually (lectures two hours a week). Also Summer 1948 (lectures five hours a week).

POLITICAL SCIENCE 3. *Comparative Government*

A comparative study of the governments of the United Kingdom, the United States of America, and the British Dominions.

TEXTS: Corry, *Democratic Government and Politics*
Ogg, *English Government and Politics*
Ogg and Ray, *Introduction to American Government*
Brady, *Democracy in the Dominions*.

PREREQUISITE: Political Science 1 or 2.

Day Division: Annually (lectures two hours a week, group discussion one hour a week).

Evening Division: Annually (lectures two hours a week). Also Summer 1948 (lectures five hours a week).

POLITICAL SCIENCE 4. *History of Political Theory*

A general introductory survey of the history and significance of political thought from ancient times to the present, together with an examination of the works of selected political thinkers and their place in national and international politics.

TEXTS: Sabine, *A History of Political Theory*
Coker, *Recent Political Thought*.

PREREQUISITE: Political Science 1 or 2.

Day Division: Annually (lectures two hours a week, group discussion one hour a week).

Evening Division: Annually (lectures two hours a week).

POLITICAL SCIENCE 5. *Early Political Theory and Institutions*

A detailed study of the development of political thought from earliest times to the 19th century.

TEXT: To be announced.

PREREQUISITE: Political Science 1 or 2.

Day Division: Annually (lectures two hours a week, group discussion one hour a week).

Evening Division: Not offered 1948-49.

POLITICAL SCIENCE 6. *Introduction to Public Administration*

A general introduction to the study of public administration including an examination of the position of the executive, legislative, administrative, and judicial functions in the modern state; cabinet government; administration and politics; administrative tribunals; the nature and place of administrative law in government; and related topics, together with a detailed examination of the principles of administration.

TEXT: To be announced.

PREREQUISITE: Political Science 1 or 2, and Political Science 3.

Day Division: Annually (lectures two hours a week, group discussion one hour a week).

Evening Division: Annually (lectures two hours a week).

POLITICAL SCIENCE 7. *Civil Service Principles and Legislation*

(Formerly Personnel Management 102)

A comparative study of the development of civil service personnel selection and organization in Canada, Great Britain and the United States. Topics to be studied include patronage and the spoils system, the merit system, structure and functions of typical Canadian Departments, principles of organization and classification, recruiting methods, examination programs and techniques, principles of promotion, "in-service" training, ex-service preferences, provincial and municipal civil services.

TEXT: To be announced.

PREREQUISITE: Political Science 1 or 2.

Day Division: Not offered 1948-49.

Evening Division: Annually (lectures two hours a week).

POLITICAL SCIENCE 8. *The Government of the United States*

A study of the political institutions of the United States of America and the relationships between them.

TEXT: To be announced.

PREREQUISITE: Political Science 1 or 2.

Day Division: 1949-50 and alternate years.

Evening Division: Not offered 1948-49.

POLITICAL SCIENCE 9. *Modern Political Theory and Institutions*

An examination of the theoretical basis of modern politics and of the ideas of political thinkers of the 19th and 20th centuries, with special emphasis on modern democracy and the development of socialism, communism, fascism and other political movements.

TEXT: To be announced.

PREREQUISITE: By permission.

Day Division: 1949-50 (lectures two hours a week, group discussion one hour a week).

Evening Division: 1949-50 (lectures two hours a week).

POLITICAL SCIENCE 10. *The State and Economic Life*

A study of the role of the state in economic affairs with special reference to: government regulation of industry, public utilities, public corporations, economic planning, government and labour legislation, social services, and allied topics.

TEXT: To be announced.

PREREQUISITES: Political Science 1 or 2, and Economics 2.

Day Division: Annually (lectures two hours a week, group discussion one hour a week).

Evening Division: Annually (lectures two hours a week).

POLITICAL SCIENCE 11. *Seminar in Canadian Government*

An advanced course in Canadian political institutions and problems.

TEXT: To be announced.

PREREQUISITES: Political Science 1 or 2, and Political Science 3.

Day Division: Day students attend evening seminar.

Evening Division: Annually (seminar two hours a week).

POLITICAL SCIENCE 12. *Seminar in European Comparative Government*

A study of the development and structure of government in France, Switzerland and Germany.

PREREQUISITES: Political Science 1 or 2, and Political Science 3.

Not offered 1948-49.

POLITICAL SCIENCE 13. *The Government of Russia*

An examination of the structure and background of government and politics in modern Russia.

PREREQUISITES: Political Science 1 or 2, and Political Science 3.

Not offered 1948-49.

POLITICAL SCIENCE 14. *Seminar in Political Research*

This course, for honour students only, is designed for training in research techniques and for the discussion and criticism of honour dissertations, and other special research projects pursued under the auspices of the Department in connection with the facilities available in the Archives of Canada, the Library of Parliament, and the government departments.

Day Division: Annually, for honours students only (hours arranged).

Evening Division: Not offered.

PSYCHOLOGY

Sessional Lecturers . . . Florence S. Dunlop, M.A., Ph.D.
 F. E. Whitworth, A.M., Ph.D.
 J. W. Howard, B.S.A., Ph.D., F.B.Ps.S.
 C. E. Johnson, M.A.
 C. B. Walker, B.A.

PSYCHOLOGY 2. *Introduction to Psychology*

An elementary survey of mental life.

TEXT: Murphy, *Briefer General Psychology* (Harper).

Day Division: Annually (lectures three hours a week).

Evening Division: Annually (lectures two hours a week). Also Summer 1948 (lectures five hours a week).

PSYCHOLOGY 3. *Applied Psychology*

Elementary applications of psychology with particular reference to business, industry and the home; the measurement of aptitudes and interests; personality and problems of adjustment; and a systematic treatment of problems of study habits.

TEXTS: Griffith, *An Introduction to Applied Psychology* (Macmillan)

Robinson, *Diagnostic and Remedial Techniques for Effective Study* (Harper).

PREREQUISITE: Psychology 2, or the permission of the instructor.

Day Division: 1948-49 (lectures three hours a week).

Evening Division: Annually (lectures two hours a week).

PSYCHOLOGY 4. *Psychology for Business and Industry* (Formerly Personnel Management 100)

This course considers the needs of personnel administrators, supervisors and executives. It deals with current problems and procedures in personnel management, including the following: employee selection, induction, training, placement, transferring, up-grading and employee relations. Uses of tests and rating scales in the administration of personnel. Uses of job analysis, time and motion study. Maintaining morale and job satisfaction, enquiry techniques. How to conduct a conference. How to interview. The foreman today. House organs. Executives and junior executives, etc.

REFERENCE TEXTS: Moore, *Psychology for Business and Industry*
 Bingham and Moore, *How to Interview*
 and others.

PREREQUISITE: Psychology 2 desirable but not essential.

Day Division: Not offered 1948-49.

Evening Division: Annually (lectures two hours a week).

PSYCHOLOGY 5. *Child Psychology*

PREREQUISITE: Psychology 2.

Not offered 1948-49.

PSYCHOLOGY 6. *Social Psychology*

An analysis of the individual in relation to society with reference both to personality and social organization. Emphasis will be placed on methods of analysis in social science, the socialization process and social problems emergent at the adult level in modern society. The course will include illustrative materials from various societies and case history materials. Projects and references will be assigned.

TEXT: To be announced.

PREREQUISITE: Psychology 2.

Day Division: Not offered 1948-49.

Evening Division: 1948-49 (lectures two hours a week).

PUBLIC LAW

Sessional Lecturers . . . E. R. Hopkins, M.A., LL.B.
 G. F. Henderson, B.A.
 C. F. Scott, B.A.

PUBLIC LAW 1. *The Elements of Public Law* (Formerly Public Law 100)

An introduction to the study of law, designed to acquaint the non-lawyer with the principle institutions, concepts, and classifications of the law, with special reference to Canada. (Except for students with previous legal training, this course is prerequisite for other courses in Public Law.)

Day Division: Not offered 1948-49.

Evening Division: Annually (lectures two hours a week).

PUBLIC LAW 2. *The Constitutional Law of Canada* (Formerly Public Law 102)

A general survey of the Canadian Constitution. The position of the Crown; The British North America Act and related statutes and orders with particular reference to the distribution of legislative power and attendant problems; study of selected powers of Dominion and provinces.

PREREQUISITE: Public Law 1.

Day Division: Not offered 1948-49.

Evening Division: Annually (lectures two hours a week, seminars arranged).

PUBLIC LAW 3. *Administrative Law* (Formerly Public Law 103)

This course is designed as a study of the field of administrative law in the light of current social and economic problems and relationships and in the light of the trends of modern legislation, with particular reference to Canada. Theories influencing development in the field; delegated legislation and delegated adjudicative power, their natures and extent, reasons for delegation, dangers; judicial and extra-judicial review and control; administrative procedure; suggested reforms.

PREREQUISITE: Public Law 1.

Day Division: Not offered 1948-49.

Evening Division: Annually (lectures two hours a week, seminars arranged).

PUBLIC LAW 4. *Statutes, Regulations and Orders* (Formerly Public Law 104)

PREREQUISITE: Public Law 1.

Not offered 1948-49.

PUBLIC LAW 5. *An Introduction to International Law* (Formerly Public Law 105)

An introductory course in international law, with special reference to the functions of the United Nations and the International Court of Justice in the classification and orderly development of international law, and to the negotiation and perfection of international agreements.

PREREQUISITE: Public Law 1.

Not offered 1948-49.

RELIGIOUS KNOWLEDGE

Sessional Lecturer . . . C. W. Bishop, M.A., D.D.

RELIGIOUS KNOWLEDGE 1. *New Testament Literature*

An introduction to the history and literature of the New Testament. Religious and social background of the writings of the New Testament. The Four Gospels, their origins, and the problems of their authorship and composition, including the Synoptic and Johannine problems. The life and letters of Paul and the beginnings of the Christian Church. The non-Pauline epistles and the Christian Apocalypse.

TEXT: Scott, *The Literature of the New Testament* (Columbia University Press, 1932).

Day Division: Annually (lectures and discussions three hours a week).

Evening Division: Not offered 1948-49.

RUSSIAN

Sessional Lecturer . . . D. I. Lalkow, M.D.

Note: Students in all classes are advised to procure Muller's Russian-English and English-Russian dictionaries.

RUSSIAN A.

The work comprises the elements of grammar; orthography, writing, pronunciation, accentuation, and reading of easy texts. The course in grammar, though elementary in form, is practical for reading, writing and speaking Russian. The course will also include translations from Russian into English and from English into Russian, and conversational practice. (Credit is given for this course only upon the subsequent completion of Russian 1.)

TEXTS: Bondar, *Simplified Russian Method*
Patrick, *Russian Reader*.

Day Division: Not offered 1948-49.

Evening Division: 1948-49 (lectures two hours a week).

RUSSIAN 1.

The course begins with the review and completion of Bondar's *Simplified Russian Method*. After completing the prescribed textbook the student will have a good knowledge of Russian grammar and a stock of words at his command quite sufficient for carrying on an ordinary conversation and for translating or writing business letters. The course will also include commercial correspondence; commercial letters, terms and phrases, readings dealing with various branches of commercial activity. Simple narratives of Russian life, customs and history, with short stories from Tolstoy, Dostoyevsky and Chekhov.

TEXTS: Bondar, *Simplified Russian Method*
Patrick, *Russian Reader*.

PREREQUISITE: Russian A.

Day Division: Not offered 1948-49.

Evening Division: 1948-49 (lectures two hours a week).

RUSSIAN 2.

Advanced course in grammar and syntax as exemplified in Russian classics, prose and poetry. The main object of this course is the acquisition of the "feel" of the language. Continuation of the commercial course. Composition—short and simple essays. Conversation. Continuation and completion of G. Z. Patrick's *Russian Reader*, together with the study of Russian literature as portrayed in the works of such authors as Gogol, Pushkin and Lermontov.

PREREQUISITE: Russian 1.

Day Division: Not offered 1948-49.

Evening Division: 1948-49 (lectures two hours a week).

RUSSIAN 3.

Advanced course in Russian literature, press and conversation.

PREREQUISITE: Russian 2.

Day Division: Not offered 1948-49.

Evening Division: 1948-49 (lectures two hours a week).

SOCIAL POLICY

Sessional Lecturers . . . N. L. McKellar, B.A., B. Com.
 Flora E. Hurst, M.A.
 J. W. Willard, M.A., M.P.A., A.M.

SOCIAL POLICY 1. *Social Legislation* (Formerly Social Policy 101)

A survey of Dominion and Provincial social legislation with emphasis on recent developments in the field of social security, the administration of such measures and consideration of their social and economic effects.

TEXT: To be announced.

PREREQUISITE: Economics 2.

Day Division: Not offered 1948-49.

Evening Division: 1948-49 (lectures two hours a week).

SOCIAL POLICY 2. *Labour Policy* (Formerly Social Policy 102)

Labour and employer organization; government policy in relation thereto; economic and social implications.

TEXT: To be announced.

PREREQUISITE: Economics 2.

Day Division: Not offered 1948-49.

Evening Division: 1948-49 (lectures two hours a week).

SPANISH

Lecturers M. Mercedes French, B.A.
 Doris I. Inch, M.A.

SPANISH A.

A course designed to meet the needs of students who enter with little or no knowledge of Spanish. The work will comprise the elements of grammar, the building up of basic vocabulary, exercises in pronunciation, dictation and translation, and the reading of easy Spanish prose. (Credit is given for this course only upon the subsequent completion of Spanish 1. If taken to make up a matriculation deficiency, no credit is allowed. See also Spanish 11, in which the work of Spanish A and Spanish 1 is covered in one course.)

TEXTS: House and Mapes, *The Essentials of Spanish Grammar*, Part I
 Espinosa, *Primeras Lecturas*
 Keniston, *Reading Spanish*.

Day Division: Day students take Spanish 11.

Evening Division: Annually (lectures two hours a week).

SPANISH 1.

More advanced grammar, reading, translation and oral exercises.

TEXTS: House and Mapes, *The Essentials of Spanish Grammar*, Part II
 Espinosa, *Espana*
 Cano and Saenz, *Easy Spanish Plays*
 Goggio and Tayler, *Lecturas Iberoamericanas*.

PREREQUISITE: Spanish A.

Day Division: Annually (lectures three hours a week).

Evening Division: Annually (lectures two hours a week).

SPANISH 2.

Outline of Spanish civilization and culture, reading, translation, oral exercises and grammar review.

TEXTS: Crawford, *Temas espanoles*

Palacio Valdes, *La alegria del capitan Ribot*

Alarcon, *El sombrero de tres picos*

Martinez Sierra, *Sueno de una noche de agosto*.

PREREQUISITE: Spanish 1 or 11.

Day Division: Annually (lectures three hours a week).

Evening Division: Annually (lectures two hours a week).

SPANISH 3. *Commercial Spanish*

Introduction to business Spanish; grammar review; oral exercises and translation.

TEXTS: Luria, *Correspondencia commercial al dia*

Crawford, *Temas espanoles*.

PREREQUISITE: Spanish 1 or 11.

Day Division: 1948-49 (lectures three hours a week).

Evening Division: Not offered 1948-49.

SPANISH 4.

Spanish literature of the nineteenth century. Reading of representative works; composition and conversation.

TEXTS: Zorilla, *Don Juan Tenorio*

Tamayo y Baus, *Un drama nuevo*

Echegaray, *El gran galeoto*

Fernan Caballero, *La gaviota*

Perez Galdos, *Dona Perfecta*

Sims and Switzer, *Repaso y composicion*.

PREREQUISITE: Spanish 2.

Day Division: Not offered 1948-49.

Evening Division: 1948-49 (lectures two hours a week).

SPANISH 11.

A special course for beginners in Spanish which will enable students to complete the work of Spanish A and Spanish 1 in one academic year.

TEXTS: House and Mapes, *Shorter Spanish Grammar*

Espinosa, *Primeras Lecturas*

Espinosa, *Espana*

Keniston, *Reading Spanish*

Cano and Saenz, *Easy Spanish Plays*.

Day Division: Annually (lectures five hours a week).

Evening Division: Evening students take Spanish A and 1.

STATISTICS

STATISTICS 1. *Introduction to Statistical Methods* (Formerly Statistics 100)

A survey of the history of the subject and a summary of sources of data will lead into a fairly rigorous presentation with emphasis on the frequency distribution and its measures. Applications to population, biology and business statistical analysis will provide examples of the theoretical principles.

PREREQUISITE: Mathematics 1.

Not offered 1948-49. See Mathematics 3b (Mathematical Statistics).

STATISTICS 2. *Statistical Services* (Formerly Statistics 101)

This course is now listed as Mathematics 14.

See also Mathematics 13 (Statistical Analysis).

